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Abbreviations

1	first person	FACIL	facilitative
2	second person	FACT	factual non-past
3	third person	GEN	genitive
[II], [III]	stem II, stem III	GENR	generic
ABIL	abilitative	GER	gerund
ACAUS	anticausative	HORT	hortative
ADD	additive	HUM	human
AFF	affirmative	IDPH:X	pattern X ideophone
ANTHR	anthroponym	IFR	inferential
AOR	aorist	IMM	immediate
APASS	antipassive	IMP	imperative
APPL	applicative	INDEF	indefinite
APPR	apprehensive	INF	infinitive
AUTO	autive	INF:II	dental infinitive
AUX	auxiliary	INTERJ	interjection
BARE.INF	bare infinitive	INV	inverse
CATAPH	cataphoric	IPFV	imperfective
CAUS	causative	IRR	irrealis
CISL	cislocative	LINK	linker
COLL	collective	NEG	negative
COMIT	comitative	NMLZ	nominalization
COMP	standard of comparison	OBJ	object
COND	conditional	OBL	oblique
CONV	converb	PASS	passive
DAT	dative	PCP	participle
DEG	degree	PEG	peg circumfix
DEM	demonstrative	PL	plural
DU	dual	POSS	possessive
DUB	dubitative	PROB	probabilitative
EMPH	emphatic	PROG	progressive
ERG	ergative	PROP	proprietic
		PROX	proximal

Abbreviations

PROXM	proximative
PRS	egophoric present
PST	past
PURP	purposive
QU	question
RECIP	reciprocal
REFL	reflexive
RH.Q	rhetorical interrogative
ROG	rogative
SENS	sensory
SFP	sentence final particle
SG	singular
STAT	stative
SUBJ	subject
TOTAL	totalitative reduplication
TOPO	toponym
TR	transitive
TRAL	translocative
TROP	tropative
UNEXP.DEG	unexpected degree
†XXX	incorrect form
*XXX	reconstructed form
X*	Kleene star

¹ 1 Introduction

² 1.1 The Japhug language

³ The Japhug language (local name *kuruuskyt*) is spoken by several thousand speakers in Mbarkhams county (in Chinese *Maerkang* 马尔康), Rngaba prefecture, Sichuan province, China, in the 乡 <*xiāng*> ‘townships’ of *gduurjyt* (噶曲日竹日 *gdoŋ-brg'ad*, 龙尔甲 *lóng'erjiǎ*), *sarndzu* (沙爾宗 *gsar.rdzon*, 沙尔宗 *shāerzōng*) and *tats'i* (大藏 *da.tsʰaj*, 大藏 *dàzhàng*), collectively called *tcypʰuu* or *tcʰypʰuu* (from the which name Japhug is taken).¹ All speakers of Japhug are classified as ethnic Tibetans (藏族 *zàngzú*).²

¹⁰ This work focuses almost exclusively on the dialect of *kymnu* village (干木鸟 *gānmùniǎo*), henceforth written as Kamnyu.

¹² Japhug is one of the four Core Gyalrong languages (Sun 2000a), Tshobdun, Zbu and Situ, represented in Figure 1.1. It is particularly closely related to the West Gyalrongic languages: Khroskyabs, Stau and Tangut (Sun 2000b; Jacques et al. 2017).

¹⁶ Core Gyalrong and West Gyalrongic form the Gyalrongic group (Sun 2000b), itself a subbranch of Burmo-Gyalrongic (Jacques & Michaud 2011) and possibly the larger Tibeto-Gyalrongic group (Sagart et al. 2019).

¹⁹ Japhug is in contact with both Standard Mandarin and a local variety of Sichuanese. Since no study has focused on the Sichuan Mandarin as spoken by Gyalrong speakers in Mbarkham, the present work represents all Chinese words in Standard Mandarin and pinyin (between chevrons), except for highly nativized Chinese words, presented in IPA.

²⁴ Situ Gyalrong and Amdo Tibetan used to be the two dominant languages in the area, and many speakers of Japhug also have a passive understanding of Situ, and sometimes also of Tshobdun and Zbu.³

¹The township of Gdongrbyad is however not traditionally included under the name *tcypʰuu*, and is referred instead by the term *svyju*.

²The language can be referred to as 茶堡话 *chápùhuà* in Chinese, reading the character 堡 as *pù* rather than the more usual *bǎo*. In Western languages, the ‘ph’ should be pronounced as a stop rather than labiodental fricative, and the ‘g’ read as a voiceless stop. In French for instance, I call the language [dʒapuk].

³See for example 145 (§8.2.9), 35 (§23.3.6) and 126 (§24.5.3.1), where Tshendzin recounts her

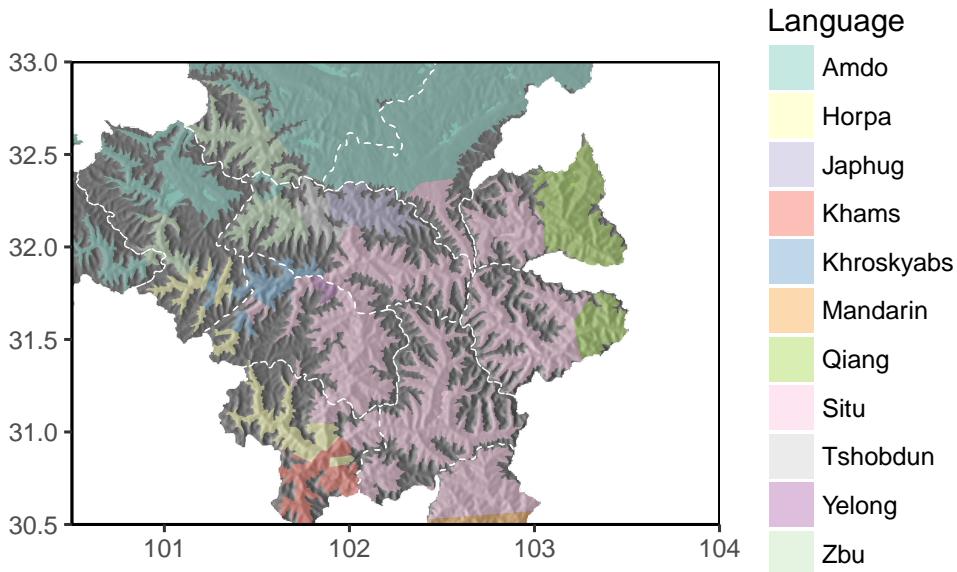


Figure 1.1: A map of Gyalrong languages

1.2 The Japhug corpus

With the exception of a chapter in Lin (1993: 468–486) on phonology and a few articles by Lin Youjing (Lin & Luoerwu 2003; Lin 2011) (all on the Tatshi dialect), the available data on Japhug are essentially from my own fieldwork, based on nine trips (July-August 2002, April-July 2003, July-August 2005, July 2010, July-August 2012, April-May 2014, July-August 2015, July-August 2016, May 2018) and constant contact by phone with my main language consultants. Some texts have been recorded with the help of my former PhD students Gong Xun and Lai Yunfan.

A short grammar (Jacques 2008b), some texts (Jacques & Chen 2010), a dictionary (Jacques 2015b) have previously been made available, to which a corpus of transcribed stories on the Pangloss archive (Michailovsky et al. 2014) can be added, available on https://lacito.vjf.cnrs.fr/pangloss/corpus/list_rsc.php?lg=Japhug&name=japhug.

My main consultant is Tshendzin (Chenzhen 陈珍, female, born 1950), a retired schoolteacher (a native speaker of Japhug, bilingual in Sichuan Mandarin since

experience as a teacher in Tshobdun village, where she had to learn Tshobdun to make herself understood by the pupil's parents.

43 childhood), whose speech and grammaticality judgements are taken as the norm
 44 of this grammar.

45 Stories have also been collected from her husband *χprltçin* Dpalcan 柏尔青,
 46 her maternal uncle Andzin, her nephew (sister's child) Ayang/Kunbzang 'Tsho,
 47 and other Kamnyu people, in particular Tshering Skyid. Most traditional stories
 48 are typical of Tibetan folklore and not specific to Japhug-speaking areas, but
 49 some procedural texts, description of local plants and animals, as well as accounts
 50 of local topography, include unique insight on local culture. In addition, a few
 51 conversations have been recorded.

52 The majority of examples in this grammar (except in the grammar sketch in
 53 chapter 2) are taken from texts or conversations rather than elicited. Most of the
 54 texts cited are already available on Pangloss, and the examples are cited using
 55 a title in ASCII characters followed by a line number.⁴ Conversations are not
 56 included in the archive at the moment of writing, but individual sound files of
 57 the sentences quoted in this grammar are preserved in a private database. In
 58 addition, a certain amount of sentences have been noted down during participant
 59 observation, and lack recordings.

60 Since speakers I have worked with only recount a limited number of traditional
 61 stories (some of which in any case are from written sources; in particular, one
 62 of the stories told by Kunbzang Mtsho is clearly adapted from a Grimm story), I
 63 have resorted to translation from Chinese to collect a larger corpus. Tshendzin
 64 provided surprisingly idiomatic renderings of various storybooks for children
 65 (including Grimm tales, Andersen tales, Liaozi zhiyi 聊斋志异, Arabian nights
 66 and Xiyouji 西游记). These documents are not given the same value as more
 67 spontaneous texts, and are systematically indicated by adding the extension “-zh”
 68 to the document name. Systematic comparison with the original text is offered
 69 whenever any suspicion of calque from Chinese exists. However, the immense
 70 morphosyntactic difference between Chinese and Japhug makes it necessary to
 71 completely rework the structure of the sentences in most cases (see for instance
 72 263, §21.7.1.2), so that even if there is undoubtedly influence from Chinese, even
 73 the way Chinese is adapted into Japhug is itself an interesting topic of research.

74 1.3 Structure of the grammar

75 Rather than being intended as the final word on Japhug grammar, this book is
 76 conceived as a tool for exploring the Japhug corpus and learning the language.

⁴Hill (2017: 305) reports that this citation format is sufficient to find the relevant data.

1 Introduction

77 The reader is invited to start with the grammar sketch (chapter 2). The rest
78 of the grammar contains two chapters on phonology (3, §4), five on nouns and
79 noun phrases (5 to 9), eleven on verbal morphology (11 to 21), five on syntax (§22
80 to 26), as well as a chapter 10 on expressives and another one 27 on kinship.

81 In writing this grammar I have always preferred to abstain from definite judge-
82 ment rather than provide incorrect data, and the description remains thus incom-
83 plete in many aspects, in particular in accounting for minute semantic differences
84 between similar constructions, or on the grammaticality of borderline sentences
85 (about which speakers sometimes change their mind). There are many points of
86 uncertainty in many aspects of the morphosyntax (and even in some topics of
87 phonology), and further research on finer points of phonology, morphosyntax
88 and historical linguistics are much needed, with additional data from different
89 speakers.

90 1.4 Language and culture

91 This work focuses on the grammar of the language, and only contains a single
92 chapter (27, on the kinship system) dedicated to ethnology. However, the corpus
93 that has been collected contains many traditional stories, as well as procedural
94 texts describing the traditional life before massive sinicization. Examples from
95 these texts are found on nearly all the pages of this grammar, and their interest
96 is not purely linguistic. Thus, the section on place names presents a mythological
97 story explaining the origin of a name (79, §5.2.1), the chapter on orientation pre-
98 verbs contains an account of the traditional living-room/kitchen (§15.1.4.4) and
99 an introduction to weaving (§15.1.4.5), and the section on antipassive derivations
100 includes a passage on rain-calling and mountain tutelary spirits (see example 160,
101 §18.6.7.3). In this sense, traditional culture permeates this grammar from begin-
102 ning till end.

103 Further ethnographical work is necessary, in particular on kinship (*Zhang*
104 forthcoming), traditional houses (*Dong* 2018), weaving and ethnobotany, and it
105 is hoped that this grammar (together with the dictionary) will make it possible
106 to properly describe local culture through the medium of Japhug rather than
107 Chinese.

¹⁰⁸ 2 A grammatical sketch

¹⁰⁹ This chapter offers a short introduction to the phonology and morphosyntax
¹¹⁰ of the Japhug language. It is written for typologists and comparative linguists
¹¹¹ wanting to get a quick general picture of this language, before delving into the
¹¹² core of the grammar.

¹¹³ Morphosyntactic phenomena are illustrated mainly using simplified elicited
¹¹⁴ examples rather than examples gleaned from texts and conversations as in the
¹¹⁵ rest of the grammar.

¹¹⁶ 2.1 Phonology and word structure

¹¹⁷ Japhug has 8 vowels ([§3.3.1](#)) and 50 consonant phonemes ([§3.2.1](#)), which can be
¹¹⁸ combined into more than 400 biconsonantal or triconsonantal clusters in the on-
¹¹⁹ set ([§4.2](#)). Additional clusters are attested across syllable boundaries ([§4.2.3.1](#)). In
¹²⁰ coda position, only 12 consonants are found, and no clusters are possible: several
¹²¹ phonological contrasts are neutralized ([§3.2.2](#)).

¹²² The IPA-based transcription in this grammar is a spelling system that is not
¹²³ strictly phonological: it uses different symbols to represent the allophones of
¹²⁴ some phonemes (in particular /w/, [§3.2.1](#), [§4.2.1.1](#)). An alternative Tibetan-based
¹²⁵ orthography for use by native speakers ([§4.4](#)) is also provided.

¹²⁶ Japhug is very far removed from the isolating, tonal and “monosyllabic” type
¹²⁷ once considered to be typical of Sino-Tibetan languages. Japhug lacks tonal con-
¹²⁸ trasts ([§3.7](#)), and monosyllabic and monomorphemic words are a minority ([§11.6](#)).
¹²⁹ Words of six syllables or more are not rare in the corpus, as shown by the verb
¹³⁰ form (1) below.

- ¹³¹ (1) *a-ky-tuu-nuu-ryzí-nuu*
IRR-PFV-2-AUTO-stay-PL
¹³² ‘May you stay (here).’

¹³³ Non-final syllables have strong phonotactic constraints at least in the native
¹³⁴ vocabulary ([§3.8.2](#)). The last syllable of verbal and nominal stems generally re-
¹³⁵ ceives stress (as the syllable *-zí-* in 1, [§3.7](#)) and allows the maximal number of
¹³⁶ vowel and consonant contrasts.

2.2 Parts of speech

Unlike other Trans-Himalayan languages such as Sinitic, where the identification of word classes requires extensive syntactic analysis (von der Gabelentz 1881; Chao 1968), most parts of speech in Japhug can be straightforwardly defined on the basis of morphology.

Japhug has open and closed parts of speech. The three main open parts of speech are *nouns*, *verbs* and *ideophones*.

Nouns can in their turn be subdivided into four classes with different morphological properties. First, inalienably possessed nouns (§5.1.2) require the presence of a possessive prefix (§5.1.1). Second, alienably possessed nouns allow a possessive prefix, but do not require it. Third, counted noun (§7.3) take numeral prefixes (§7.3.1). Fourth, unpossessible nouns cannot be prefixed (§5.2).

Verbs are at the core of Japhug grammar, and have the richest morphology of all parts of speech – no less than nine chapters (from 11 to 21), about half of the grammar, is devoted to verbal morphology. Unlike other Trans-Himalayan languages such as Khaling, whose verbs are a closed class (Jacques et al. 2012), Japhug has a productive system of denominal and deideophonic morphology (§20), allowing a constant creation of new verbs. Apart from a handful of defective verbs (§14.2.2, §14.3.4), all verbs require orientation preverbs (§15.1) in most finite forms, and are the only part of speech compatible with these preverbs. Person indexation morphology (§14.2.1) is also a criterion for identifying verbs, but it is not always applicable since some verbs only occur in 3SG with no indexation affixes (§14.2.7), and since a few predicative words have adopted number indexation suffixes by analogy with verbs (§14.7).

Ideophones (§10.1) can also be distinguished from other parts of speech by specific morphological patterns (§10.1.2).

There is no specific class of ‘adjective’ in Japhug. Words describing properties belong to three different parts of speech: adjectival stative verbs, which can be distinguished from other stative verbs by their ability to undergo the tropative derivation (§17.5), ideophones, and also property nouns, a subclass of inalienably possessed nouns (§5.1.2.7).

Closed parts of speech comprise numerals (§7.1) and pronouns (chapter 6), which also have specific morphology, and invariable words including postpositions (§8.2), determiners (§9.1), adverbs (§22.2, §26.1.1), linkers (§25.1.6, §9.1.5.5), interjections and calling sounds (§10.2) and sentence final particles (§10.4).

¹⁷² 2.3 Nominal morphology

¹⁷³ This section presents nominal inflection, derivation as well as grammatical categories expressed by syntactic rather than morphological means within noun phrases and postpositional phrases.

¹⁷⁶ 2.3.1 Non-attested nominal morphological categories

¹⁷⁷ There is no gender, definiteness, obviation, negation and tense-aspect-modality-evidential inflection or derivation on nouns in Japhug.

179 The whole category of gender is completely absent from Japhug grammar;
180 there are only suffixes for male and female animals, and even these are borrowed
181 from Tibetan (§5.7.7).

182 There is no dedicated marker of definiteness (§9.1.4.3), but the aforementioned
183 topic marker *icq^ha* only occurs on definite referents (§9.1.5.2). Indefiniteness can
184 be marked by the indefinite article *ci* (§9.1.4.1) derived from the numeral ‘one’
185 (§7.1.1).

186 While an obviative/proximative contrast is reflected by some uses of the in-
187 verse prefix in the inflection of transitive verbs (§14.3.3.2), Japhug lacks obvia-
188 tive morphology on nouns (§5.1.1.3), unlike Algonquian languages (for instance
189 Valentine 2001: 183).

190 Polarity and Tense-aspect-modality-evidentiality, which are prominently en-
191 coded by verbal morphology (§13.1, chapter 21), even on nominalized verb forms
192 (§16.1.1.2), are completely absent from nominal morphology, and various types
193 of participial clauses have to be used instead (§5.7.10).

194 2.3.2 Number

Number can be indicated by the dual *ni* (§9.1.1.1) and plural *ra* (§9.1.1.2) determiners. These determiners are not mutually incompatible with numerals, as shown by (2), where the redundant *ɛnuz* ‘two’ can be added (these redundant forms, though grammatical, are not very common). The fact that numerals (and other postnominal modifiers, including relative clauses) can be inserted between nouns and number determiners show that they are not analyzable as number suffixes.

- 201 (2) *jla* (*ŋnuz*) *ni*
male.hybrid.yak two DU
202 'The two male hybrid yaks.'

Table 2.1: Numeral prefixes of counted nouns

	Numeral	<i>-sŋi</i> ‘day’	
1	<i>ci</i>	<i>tuu-sŋi</i>	‘one day’
2	<i>ɛnuz</i>	<i>ɛnu-sŋi</i>	‘two days’
3	<i>χsum</i>	<i>χsu-sŋi</i>	‘three days’
4	<i>kuβde</i>	<i>kuβde-sŋi, kuβdγ-sŋi</i>	‘four days’
5	<i>kumju</i>	<i>kumju-sŋi, kumjy-sŋi</i>	‘five days’
6	<i>kuτʂy</i>	<i>kuτʂy-sŋi</i>	‘six days’
7	<i>kuçnuz</i>	<i>kuçnu-sŋi</i>	‘seven days’
8	<i>kurcat</i>	<i>kurcγ-sŋi</i>	‘eight days’
9	<i>kungut</i>	<i>kuungu-sŋi</i>	‘nine days’
10	<i>sqi</i>	<i>squ-sŋi</i>	‘ten days’

203 Some nouns however do have an inflectional number category, expressed by
 204 a prefixal paradigm partially illustrated in Table 2.1 (§7.3.1).

205 This type of nouns corresponds to the category called ‘classifiers’ (Chao 1968:
 206 518, Aikhenvald 2000) (量词 <liàngcí> in Chinese) in works on the grammar of
 207 Chinese, Japanese and other languages of East Asia. However, this terminology
 208 is particularly clumsy in the case of Japhug. Unlike in languages such as Chinese
 209 or Thai, nouns in Japhug do not require a ‘classifier’ to be used with a numeral,
 210 as shown by (3)¹ and (4).

- 211 (3) *tc^heme ci*
 girl one/INDEF
 212 ‘A/one girl’

- 213 (4) *tc^heme χsum*
 girl three
 214 ‘Three girls’

215 When occurring as postnominal modifiers (5), the two main functions of nouns
 216 with numerals prefixes are partitive (‘one of the X’) and distributive (‘each X’)
 217 depending on the constructions where they appear (§7.3.2).

- 218 (5) *tc^heme tuu-rdoṣ*
 girl one-piece
 219 ‘One of the girls’; ‘Each girl...’; ‘One girl’

¹The numeral *ci* ‘one’ is grammaticalized as an indefinite marker (§9.1.4.1).

In addition, although a handful of ‘classifiers’ are indeed specific to a particular semantic category of nouns (§7.3.3), the generic ‘classifier’ *tu-rdoʂ* ‘one piece’ can be used as modifier with nearly all referents.

For these reasons, this grammar favours the term *counted noun* based on morphology, rather than ‘classifier’ (an extremely marginal function of these words) or ‘quantifier’ (not specific enough, since there are many quantifiers that are not counted nouns, §9.1.3) to refer to nouns with numeral prefixes such as *tu-spi* ‘one day’ or *tu-rdoʂ* ‘one piece’.

2.3.3 Case marking

Japhug lacks case inflection, but has a few regular adverbializing derivations (§5.8), whose functions resemble that of oblique cases: the comitative *ký-* (§5.8.1) and the perative (§5.8.2).

Grammatical relations on noun phrases are encoded by postpositions such as the ergative *kuu* (§8.2.2), the genitive *yuu* (§8.2.3) and the comitative *cʰo* (§8.2.5), as well as relator nouns (§8.3) such as the dative *w-čki* or *w-pʰe* (§8.3.1). With the sole exception of the genitive forms of a few pronouns such as *azuy* 1SG:GEN (from *azo* ‘1sg’ and *yuu*, §6.3), the postpositions do not merge phonologically with the previous word. As shown by (6) and (7), they are located at the end of the noun phrase, further away from the head noun than all determiners, including number markers.

- (6) [[*w-pi ni] kuu*] *pya nuu pa-mto-ndzi*
 3SG.POSS-elder.sibling DU ERG bird DEM 3→3':AOR-see-DU
 ‘His two elder (brothers/sisters) saw the bird.’

- (7) [[*turme ra] yuu*] *nui-fsapab*
 person PL GEN 3PL.POSS-cattle
 ‘People’s cattle.’

In addition, it is possible to make a pause between the noun and the postposition *kuu* or *yuu* that follows: the postposition can be procliticized to the following word. A considerable number of examples can be found in the corpus (§8.2.1).

While Situ Gyalrong does have locative suffixes (Lin 1993: 325–331), Japhug only uses postpositions (§8.2.4.1) and/or relator nouns (§8.3.4.5) to express location, goal and source of motion. The only traces of the proto-Gyalrong suffixes are the locative postposition *z̥uu*, which was degrammaticalized from a suffix *-s (§8.2.4.1), and a few isolated lexicalized forms (§8.2.4.4, §8.3.4.5).

252 **2.3.4 Possession**

253 The main nominal morphosyntactic category expressed by an inflectional para-
 254 digm in Japhug is possession, encoded by a series of possessive prefixes (§5.1.1).

255 **2.3.4.1 Possessive paradigm**

Table 2.2: Possessive paradigms

Person	Prefix	<i>tu-ku</i> ‘head’	<i>kʰa</i> ‘house’
1SG	<i>a-</i>	<i>a-ku</i>	<i>a-kʰa</i>
2SG	<i>nɣ-</i>	<i>nɣ-ku</i>	<i>nɣ-kʰa</i>
3SG	<i>w-</i>	<i>w-ku</i>	<i>w-kʰa</i>
1DU	<i>tɕi-</i>	<i>tɕi-ku</i>	<i>tɕi-kʰa</i>
2/3DU	<i>ndʑi-</i>	<i>ndʑi-ku</i>	<i>ndʑi-kʰa</i>
1PL	<i>ji-</i>	<i>ji-ku</i>	<i>ji-kʰa</i>
2/3PL	<i>nu-</i>	<i>nu-ku</i>	<i>nu-kʰa</i>
indefinite	<i>tu-</i> / <i>tr-</i> / <i>ta-</i>	<i>tu-ku</i>	<i>kʰa</i>
generic	<i>tu-</i>	<i>tu-ku</i>	<i>tu-kʰa</i>

256 The possessive paradigm is nearly the same for all nouns (Table 2.2), but some
 257 nouns such as *tu-ku* ‘head’ require a indefinite possessor prefix *tu-*, *tr-* or *ta-*
 258 when no definite possessor is present, while other nouns like *kʰa* ‘house’ can oc-
 259 cur in bare stem form. The former are *inalienably possessed nouns*, comprising in
 260 particular body parts (§5.1.2.3) and kinship terms (§5.1.2.4), while the latter are
 261 *alienably possessed nouns*. Some inalienably possessed nouns have been gramma-
 262 ticalized as relator nouns (§8.3) marking the syntactic function of noun phrases.
 263 Furthermore, a handful of nouns have become TAME markers (§21.8.3.1).

264 Possessors are obligatorily indicated by possessive prefixes. An overt posses-
 265 sor can be optionally added. For instance, the meaning ‘my cow’ can be expressed
 266 by the noun form *a-nuŋa* with a simple possessive prefix, but this noun can be
 267 additionally preceded by the genitive pronoun *azuy* (8) or even by the absolute
 268 *azo*.

- 269 (8) (*azuy*) *a-nuŋa*
 1SG 1SG.POSS-COW
 270 ‘My cow.’

271 The possessive prefix cannot be elided, even in the case of alienably possessed
 272 nouns like *nurja* ‘cow’. In (8), removing the *a-* prefix would result in an agram-
 273 matical form (*†azuyu* *nurja*).

274 The phrase expressing the possessor always precedes the possessum. Genitive
 275 marking on the possessor is optional: in (9), the genitive postposition *yuu* (§8.2.3.1)
 276 can be elided.

- 277 (9) [*a-mu* *a-wa* *ni*] (*yuu*) *ndzi-nurja*
 1SG.POSS-mother 1SG.POSS-father DU GEN 3DU.POSS-cow
 278 ‘My parents’ cow.’

279 The person and number of the possessive prefix on the possessum is the same
 280 at that of the noun phrase or pronoun marking the possessor: in (9) for instance,
 281 the third dual possessive prefix *ndzi-* agrees in number with the dual possessor
 282 phrase *a-mu a-wa ni*. Number agreement mismatch is only attested in very re-
 283 stricted contexts (§5.1.1.2).

284 2.3.4.2 Alienabilization

285 Nouns can only take one single possessive prefix, except when inalienably pos-
 286 sessed nouns are turned into alienably possessed nouns (§5.1.2.9), by stacking a
 287 definite possessor prefix (any of the prefixes in Table 2.2 except the indefinite
 288 ones) on the indefinite possessive form. For instance, the possessed form *u-lu*
 289 (10a) of *tr-lu* ‘milk’ without prefix stacking is used when the possessor is the
 290 cow *producing* the milk, but the alienabilized possessive forms *u-tr-lu* ‘his/her/
 291 its milk’, the milk for him/her/it’ (10b) or *a-tr-lu* ‘my milk’ (10c), expressing the
 292 person or animal *drinking* the milk as possessor, have a combination of two pre-
 293 fixes.

- 294 (10) a. *nurja* (*yuu*) *u-lu*
 cow GEN 3SG.POSS-milk
 295 ‘(The/a) cow’s milk.’
 b. *lulu* (*yuu*) *u-tr-lu*
 cat GEN 3SG.POSS-INDEF.POSS-milk
 297 ‘The milk for the cat (given to the cat to drink).’
 c. *(azo)* *a-tr-lu*
 1SG 1SG.POSS-INDEF.POSS-milk
 299 ‘My milk (for me to drink).’

300 Stacking of two definite possessor prefixes, or of a numeral prefix with a defi-
 301 nite possessor prefix, are not grammatical.

302 2.3.4.3 Generic possessors

303 The indefinite possessor prefix has three allomorphs *tu-* (as in in *tu-ku* ‘head’),
 304 *tr-* (as in *tr-se* ‘blood’) or *ta-* (as in *ta-ma* ‘work’). It has to be distinguished from
 305 the generic possessor prefix *tu-* (§5.1.3). Generic possessors are identical with
 306 indefinite possessors in the case of inalienably possessed nouns selecting the *tu-*
 307 prefix, for instance *tu-ku* can either mean ‘head’ or ‘one’s head’. With inalienably
 308 possessed nouns selecting the *tr-* or *ta-* allomorphs, a contrast is found between
 309 *tr-se* ‘blood’ and *tu-se* ‘one’s blood’ (11) for instance.

- 310 (11) *qajusmynba ku^u tu-se ku-ts^{hi} nyu*
 leech ERG GENR.POSS-blood IPFV-drink be:FACT
 311 ‘The leech drinks people’s (one’s) blood.’

312 The generic possessor prefix can also occur on alienably possessed nouns, as
 313 in *tu-k^ha* ‘one’s house’.

314 No more than one generic referent is possible per clause, so that if a noun
 315 with generic possessor prefix is found in the same clause as a verb with generic
 316 indexation, there is obligatory co-reference (§14.3.2.5), as in (12) between the pos-
 317 sessor of *tu-rpu* ‘one’s mother’s brother’ (indefinite form *tr-rpu*, §5.1.2.4) and the
 318 transitive subject of the verb *tu-ku-ti* ‘one says’ (§14.3.4).

- 319 (12) *tu-rpu yu^u u^u-rza^β u^u-cki tce*
 GEN.POSS-mother’s.brother GEN 3SG.POSS-wife 3SG.POSS-DAT LOC
 320 “*a-^hla^β*” *tu-k^uu-ti nyu*
 1SG.POSS-aunt IPFV-GENR-say be:FACT
 321 ‘One_i calls one_i’s mother’s brother’s wife ‘my aunt’ (one says ‘my aunt’
 322 to one’s mother’s brother’s wife).’

323 2.3.4.4 Possessive existential construction

324 Predicative possession can be expressed by the verb *aro* ‘own’ (§14.2.3, §22.5.2),
 325 encoding the possessor as subject, but the most frequent construction involves
 326 an existential verb (§22.5.1.2) with the possessum as subject and the possessor
 327 marked by a possessive prefix on the possessum, optionally with a genitive phrase
 328 (§22.5.2.1). The construction is the same for alienably (13a) and inalienably (13b)
 329 possessed nouns.

- 330 (13) a. *ku^hβ^ha ra yu^u nu-nuŋa ku^u-d^hn pj^h-tu*
 noble PL GEN 3PL.POSS-COW SBJ:PCP-be.many IFR.IPFV-exist
 331 ‘The nobles had many cows.’

- 332 b. *kuit̪va ra yuu nu-tcuu* *χsum p̪y̪-tu*
 noble PL GEN 3PL.POSS-son three IFR.IPFV-exist
 333 ‘The nobles had three sons.’

334 In this construction, the existential verbs rarely agree in number with the pos-
 335 sessum: in both (13a) and (13b), the singular verb form *p̪y̪-tu* is by far more com-
 336 monly used than its plural counterpart (§14.6.1.1).

337 2.3.5 Compounding

338 Compounding can be realized by the simple concatenation of noun (or verb)
 339 stems.

340 In compounds comprising two noun stems (§5.5.1), whose order is modifier-
 341 modified, no possessive prefixes occur between the nominal stems, even if the
 342 second noun is inalienably possessed. For instance, the compound built from
 343 *kuruu* ‘Tibetan’ and the inalienably possessed *tu-ŋga* ‘clothes’ is *kuruu-ŋga* ‘Ti-
 344 betan clothes’, rather than †*kuruu-tunga*.

345 In many cases, the non-final elements of the compound appear in a bound
 346 form, the *status constructus* (§5.4), which is characterized by a vocalic change
 347 to either *-v* or *-u* (§5.4.1). For instance, compounding *tu-ku* ‘head’ with *tr-rme*
 348 ‘hair’ yields *tr-kyr-rme* ‘head hair’ with the *status constructus* *kyr-* from *-ku*. The
 349 compound inherits the allomorph *tr-* of the indefinite possessor prefix of the
 350 head of the compound *tr-rme* ‘hair’.

351 2.3.6 Derivations

352 Some suffixal nominal derivations come from compounds with a grammaticalized
 353 noun as second element, in particular the diminutive suffixes (§5.7.3). The
 354 recent origin of these suffixes can be shown by the fact that a free form still co-
 355 exists with the corresponding compound in some cases. For instance, the com-
 356 pound *χpun-pu* ‘little monk’ from *χpun* ‘monk’ with the diminutive *-pu* occurs
 357 in free variation with the phrase (14), in which the main noun is followed by the
 358 alienably possessed property noun *wu-puu* ‘little one’ (§5.1.2.7) derived from *tr-puu*
 359 ‘offspring, young’.

- 360 (14) *χpun wu-puu*
 monk 3SG.POSS-little.one
 361 ‘(The/a) little monk.’

Not all suffixal derivations have transparent origins. The privative *-lu* suffix (§5.7.1), which is not related to any independently attested nominal or verbal root, turns an inalienably possessed noun into a non-possessive one mainly used as postnominal modifier (§9.1.8.1), removing possessive prefixes and subjecting the nominal stem to *status constructus* alternation (*tui-ku* ‘head’ → *kṛ-lu* ‘headless’).

Prefixal nominal derivations on the other hand do not originate from elements of compounds, but rather from participial forms of denominal verbs (§20.2.4, §20.2.5).

The social relation collective *kyndzi-* prefix (§5.7.8.1) occurs on the bare stem of kinship terms and a few other terms of social relationship to indicate a group of people. When the group members are related to each other by a symmetrical relationship (*tx-xtx* ‘brother’ (of a male) → *kyndzi-xtx* ‘group of brothers’), the social relation collective is based on only one nominal stem, but when the relationship is asymmetrical, *kyndzi-* can be prefixed to two compounded noun stems, as in *kyndzi-wymu-snom* ‘group of siblings’ from *tx-wymu* ‘brother’ (of a female) and *tx-snom* ‘sister’ (of a male).

The comitative derivation (§5.8.1) is built by adding the prefixes *kṛ-* or *kṛyu-* to reduplicated noun stems. It derives an adverb meaning ‘together with X’ which can have scope over the whole clause, or be restricted to a noun phrase. It can apply to both inalienably possessed nouns (*tui-ŋga* ‘clothes’ → *kṛ-ŋgu~ŋga* ‘together with his/her clothes’) or alienably possessed ones (*jla* ‘hybrid yak’ → *kṛ-jlu~jla* ‘together with the/his/her hybrid yak’). Comitative derivation can preserve the indefinite possessor prefix of inalienably possessed nouns, causing alienabilization (§2.3.4.2, §5.1.2.9). For instance, *tx-rte* ‘hat’ has two comitative forms: *kṛ-rtu~rte* ‘together with his/her hat’ (wearing it) and *kṛ-tx-rtu~rte* ‘together with a/the hat’ (not wearing it).

2.4 Verbal morphology

2.4.1 Overview

Verbs have a considerably more elaborate morphology than all other parts of speech (§11.1). Verbal morphology is strongly prefixal (§11.2), with some vowel contractions (§12.3). Non-concatenative morphology includes stem alternations (§12.2) as well as infixation (§11.2.2, §14.2.2, §19.1.2).

Japhug verbal morphology is considerably more regular than that of other Gyalrong languages, in particular Zbu (Sun 2004; Gong 2018) and Situ (Zhang 2018). Most alternations are productive and predictable, and irregular verbs are limited in number (§14.2.2, §14.3.4).

398 As illustrated by (15), a verb form can comprise six inflectional prefixes (in
 399 blue) arranged in a rigid template (§11.2.1) and several derivational prefixes (in
 400 red).

- 401 (15) *a⁻⁶-my⁻⁵-yuu⁻⁴-nuu⁻³-túu⁻²-wy⁻¹-z-ný-re*
 IRR⁻⁶-NEG⁻⁵-CISL⁻⁴-PFV⁻³-2⁻²-INV⁻¹-CAUS-DENOM-laughter
 402 ‘Don’t let him come and make you laugh.’

403 The suffixal chain (§11.3) only includes inflectional suffixes, with a maximal
 404 number of four slots (16).

- 405 (16) *umx⁻⁶-puu⁻³-kuu⁻²-mto-t⁺¹-a⁺²-ndzi⁺³-ci⁺⁴*
 PROB⁻⁶-AOR⁻³-PEG⁻²-see-PST:TR⁺¹-1SG⁺²-DU⁺³-PEG⁺⁴
 406 ‘It looks like I have seen the two of them.’

407 Numerous non-adjacent dependencies (§11.5) are observed across the prefixal
 408 and the suffixal chains.

409 Inflectional verbal morphology encodes person and number of one or two core
 410 arguments (chapter 14, §2.4.2.2), orientation (§15.1), associated motion (§15.2),
 411 negation (§13.1) and Tense-Aspect-Modality-Evidentiality (chapter 21).

412 2.4.2 Indexation

413 All finite verb forms in Japhug have obligatory person indexation. Since the 3SG
 414 has zero marking as in many languages of the world (Benveniste 1966b: 227–
 415 236), indexation is not conspicuous on intransitive verbs requiring a 3SG subject
 416 (§14.2.7), but indirectly observable even on transitive dummy verbs (§14.3.5) due
 417 to the presence of stem alternation (§12.2.2).

418 Transitive and intransitive verbs are clearly distinguished by a series of seven
 419 morphological parameters (§14.3.1). Intransitive verbs only index one argument
 420 (the intransitive subject, S), and transitive verbs index two arguments (the tran-
 421 sitive subject A and the object O). Semi-transitive verbs have intransitive indexation
 422 (§14.2.3), but select a second core argument (§8.1.5). Only a handful of verbs
 423 are labile, and can be conjugated either transitively or intransitively (§14.5).

424 2.4.2.1 The intransitive paradigm

425 Person indexation in Japhug is best introduced with the intransitive paradigm
 426 (§14.2.1), since it is considerably smaller than the transitive one. The regular pa-
 427 radigm is illustrated in Table 2.3 with the verb *mbyom* ‘hurry’, ‘be in a hurry’ in
 428 the Factual Non-Past, the only TAME without orientation preverb (§21.3.1).

Table 2.3: The intransitive indexation paradigm

Person	Form	Example
1SG	$\Sigma\text{-}a$	<i>mbyom-a</i>
1DU	$\Sigma\text{-}t̪i$	<i>mbyom-t̪i</i>
1PL	$\Sigma\text{-}ji$	<i>mbyom-i</i>
2SG	<i>tuu</i> - Σ	<i>tuu-mbyom</i>
2DU	<i>tuu</i> - Σ - <i>ndži</i>	<i>tuu-mbyom-ndži</i>
2PL	<i>tuu</i> - Σ - <i>nua</i>	<i>tuu-mbyom-nua</i>
3SG	Σ	<i>mbyom</i>
3DU	Σ - <i>ndži</i>	<i>mbyom-ndži</i>
3PL	Σ - <i>nua</i>	<i>mbyom-nua</i>

429 The intransitive paradigm has different forms for singular, dual and plural.
 430 First persons have dedicated suffixes encoding both person and number; there is
 431 no inclusive/exclusive contrast. Second and third person forms are distinguished
 432 by the second person *tuu*- prefix (on the historical significance of this prefix, see
 433 Jacques 2012a and DeLancey 2014). There is no overt third person marker on
 434 intransitive verbs. Number markers are shared by second and third person forms:
 435 absence of suffix for the singular, *-ndži* for the dual and *-nua* for the plural. Slightly
 436 different forms are found in dialects of Japhug other than Kamnyu (§14.8.1). In
 437 addition to the paradigm in Table 2.3, a generic person *kua*- prefix also occurs on
 438 intransitive verbs (§14.3.2.5).

439 A handful of intransitive verbs infix rather than prefix the second person
 440 (§14.2.2). It is the only irregularity related to person indexation in intransitive
 441 verbs in Japhug.

442 2.4.2.2 The transitive paradigm

443 The transitive paradigm is too large to be described in this introductory chapter
 444 in its entirety (§14.3.2). Table 2.4 presents the singular forms of the paradigm
 445 of the transitive verb *sat* ‘kill’ (a verb lacking stem alternations) in the Factual
 446 Non-Past, which are sufficient to illustrate its basic structure. In this table, the
 447 columns represent the objects (O), and the rows the subjects (A). The shaded cells
 448 indicate configurations with coreferent subject and object, which are expressed
 449 by the reflexive derivation (§18.3) and do not belong to the transitive paradigm.

Table 2.4: The transitive paradigm (singular forms) of the non-alternating verb *sat* ‘kill’ in the Factual Non-Past

	1O	2O	3O	3'O
1A		<i>ta-sat</i>	<i>sat-a</i>	
2A	<i>kuu-sat-a</i>		<i>tuu-sat</i>	
3A	<i>yúu-sat-a</i>	<i>tuú-wy-sat</i>		<i>sat</i>
3'A			<i>yúu-sat</i>	

450 The comparison of Tables 2.3 and 2.4 shows that the 1SG -*a* suffix and the se-
 451 cond person *tu-* prefix have neutral alignment: they can index intransitive sub-
 452 ject, transitive subject or object. In the following, the person configurations are
 453 referred to by $X \rightarrow Y$, where X represents the subject and Y the object (for
 454 instance $1 \rightarrow 3$ means ‘first person subject, third person object’). The eight non-
 455 shaded cells of the paradigm in Table 2.4 can be divided into three groups.

456 First, $1 \rightarrow 3$, $2 \rightarrow 3$ and $3 \rightarrow 3'$ are the *direct* configurations with a third person
 457 object, whose forms resemble the 1, 2 and 3 forms of the intransitive paradigm
 458 (at least in the Factual Non-Past).

459 Second, $3 \rightarrow 1$, $3 \rightarrow 2$ and $3' \rightarrow 3$ are the *inverse* configurations, which have the
 460 same prefixes or suffixes as the corresponding intransitive and direct forms (at
 461 least in this paradigm), but take in addition the inverse prefix *yúu-/wy-* (the allo-
 462 morphy of this prefix is explained in §14.3.2.7).

463 Third, $1 \rightarrow 2$ and $2 \rightarrow 1$ (without third person) are the the *local* configurations
 464 (§14.3.2.3). They are characterized by the presence of the portmanteau *ta-* and
 465 *kuu-* prefixes (§14.8.3) not found in the intransitive paradigm.

466 The reasons for using the terms “direct” and “inverse” to describe the transitive
 467 paradigm are discussed in §14.3.2.8.

468 When both arguments are third person (§14.3.2.2), there is a contrast between
 469 direct $3 \rightarrow 3'$ and inverse $3' \rightarrow 3$ configurations, whose meaning is not entirely
 470 straightforward (§14.3.3). The subject of the direct configuration, and object of
 471 the inverse one is called *proximate* (3), and the other argument *obviative* (3'). The
 472 direct $3 \rightarrow 3'$ configuration is by far the most common one in narratives and con-
 473 versation. The inverse $3' \rightarrow 3$ is more restricted; it occurs in particular to index a
 474 generic subject with a third person object (§14.3.2.5), and also when the subject
 475 is inanimate and the object animate (§14.3.3.1).

476 The majority of transitive verbs (all verbs ending in closed syllables or with
 477 front vowels) are non-alternating like *sat* ‘kill’. However, about a third of all transi-
 478 tive verbs (those ending in -*a*, -*u*, -*o* and -*wu*) have stem alternation in the *direct*

2 A grammatical sketch

479 configurations with a singular subject in the Factual Non-Past and a few other
 480 tenses (§12.2.2).

Table 2.5: The transitive paradigm (singular forms) of the alternating verb *ʂnduu* ‘hit’ in the Factual Non-Past

	1O	2O	3O	3' O
1A		<i>ta-ʂnduu</i>	<i>ʂndi-a</i>	
2A	<i>kuu-ʂnduu-a</i>		<i>tuu-ʂndi</i>	
3A	<i>yú-ʂnduu-a</i>	<i>tú-wy-ʂnduu</i>		<i>ʂndi</i>
3'A			<i>yú-ʂnduu</i>	

481 Table 2.5 illustrates the singular forms of the alternating verb *ʂnduu* ‘hit’, which
 482 has additional stem *-ʂndi* in the 1SG→3, 2SG→3 and 3SG→3' configurations (with
 483 blue colouring), which are thus different from the corresponding intransitive
 484 forms.

485 In the Aorist (§21.5.1.1), a slightly different paradigm is found, illustrated in
 486 Table 2.6 with the *ʂnduu* ‘hit’. Unlike the Factual Non-Past shown in the previous
 487 tables, the Aorist requires an orientation preverb (§15.1.1.1), here the UPWARDS
 488 *tr-*. There is no stem alternation marking the direct forms, but all verbs have a
 489 different series of preverbs (here *ta-*) in the direct 3→3' forms (§21.5.1.1, §15.1.1.1).
 490 In addition, the 1SG→3 and 2SG→3 forms require a *-t* suffix which redundantly
 491 encodes both person and tense-aspect (§11.3).

Table 2.6: The transitive paradigm (singular forms) of the verb *ʂnduu* ‘hit’ in the Aorist

	1O	2O	3O	3' O
1A		<i>tr-ta-ʂnduu</i>	<i>tr-ʂnduu-t-a</i>	
2A	<i>tr-kuu-ʂnduu-a</i>		<i>tr-tuu-ʂnduu-t</i>	
3A	<i>tr-wy-ʂnduu-a</i>	<i>tr-tú-wy-ʂnduu</i>		<i>ta-ʂnduu</i>
3'A			<i>tr-wy-ʂnduu</i>	

492 There is no ambiguity in person indexation in Japhug (unlike for instance in
 493 Khaling where 2→1 and 3→1 configurations are identical, Jacques et al. 2012),
 494 but there are strong restrictions on number indexation: unless the 1SG suffix is
 495 present, only one of the two arguments can be indexed for both person and num-
 496 ber, the subject in direct configurations, and the object in inverse and local config-
 497 urations. Double number indexation only occurs in forms with the 1SG *-a* suffix, to

498 which additional number suffixes can be added (§14.3.2.6), for instance *yú-bndu-a-nuu*
 499 ‘they will hit me’ (3PL→1SG) where the plural morpheme *-nuu*, indexing the
 500 number of the subject, follows the 1SG.

501 2.4.2.3 Person indexation and finiteness

502 Person indexation markers (including person-indexing stem alternation and ori-
 503 entation preverbs) are not found on participles, infinitives and other non-finite
 504 verb forms (chapter 16). A handful of phatic and exclamative words of nomi-
 505 nal origin have however developed the ability to take number suffixes (§2.8.3,
 506 §14.7). Apart from these, words belonging to parts of speech other than verbs are
 507 incompatible with the indexation affixes described in this section.

508 2.4.3 Orientation preverbs and TAME

509 This section focuses on morphology. Since the use of the TAME categories in-
 510 volve sometimes subtle semantic nuances, and have to be explained on the basis
 511 of examples with a clear context, the discussion of the semantic function of each
 512 category is deferred to chapter 21.

513 2.4.3.1 The morphology of orientation preverbs

514 The main morphological exponents of tense, aspect, modality and evidentiality
 515 (henceforth TAME) in Japhug are the orientation preverbs (§15.1). All regular fi-
 516 nite verb forms require *one and only one* preverb (§11.2.1), except the Factual Non-
 517 Past (§21.3.1) which does not take any preverb. Stacking of two or more preverbs
 518 is ungrammatical. Only a handful of irregular defective verbs are incompatible
 519 with orientation preverbs (§14.2.2, §14.3.4).

520 Preverbs encode one out of seven orientations (Table 2.7), divided into three
 521 dimensions: vertical (§15.1.3.1), riverine (§15.1.3.2) and solar (§15.1.3.3), to which
 522 an unspecified orientation is added. This tridimensional system is not restricted
 523 to verbal morphology: locative relator nouns (§8.3.4.1), egressive postpositions
 524 (§8.2.10) and locative adverbs (§15.1.1.4) have similar systems with six orienta-
 525 tions, built from morphemes that are historically related to the preverbs.

526 There are four series of preverbs (Table 2.7 includes two of them, the series A
 527 and B) in the Kamnyu dialect, used in different TAME categories (§15.1.1.1). Some
 528 dialects of Japhug have a slightly different system (§15.1.1.3).

529 *Oriental verbs* (§15.1.2) are compatible with all orientations; this includes in
 530 particular motion verbs like *yi* ‘come’ and *tox* ‘come out’ (§15.1.2.1). With this

Table 2.7: Orientation preverbs in Kamnyu Japhug

Dimension	Orientation	A	B
Vertical	Up	<i>tx-</i>	<i>tu-</i>
	Down	<i>pu-</i>	<i>pju-</i>
Riverine	Upstream	<i>lx-</i>	<i>lu-</i>
	Downstream	<i>t^hu-</i>	<i>c^hu-</i>
Solar	Eastwards	<i>kx-</i>	<i>ku-</i>
	Westwards	<i>nu-</i>	<i>jnu-</i>
Unspecified		<i>jx-</i>	<i>ju-</i>

531 type of verbs, the preverbs indicate either the absolute direction of the motion
 532 (§15.1.3), for instance UPWARDS in (17) or have extended meanings (§15.1.4), such
 533 as the illative function (§15.1.4.2) of the UPSTREAM preverb in (18).

- 534 (17) *txŋe tx-łɔŋ*
 sun AOR:UP-come.up
 535 ‘The sun rose.’

- 536 (18) *wi-ŋgu lɔ-yi*
 3SG.POSS-in IMP:UPSTREAM-come
 537 ‘Come in! (for instance, inside a house)’

538 Non-orientable verbs only select a restricted number of lexically determined
 539 orientations, sometimes only one (§15.1.5). For instance, the verb *ndza* ‘eat’ and
 540 *mto* ‘see’ require the UPWARDS (§15.1.5.4) and DOWNWARDS (§15.1.5.9) preverbs,
 541 respectively.

542 2.4.3.2 The morphology of TAME categories

543 There are eleven primary TAME categories, which can be divided into four main
 544 groups: Non-Past (Factual Non-Past, Egophoric Present, Sensory, §21.3), Imper-
 545 fective (§21.2), Past (Aorist, Inferential, Past Imperfective, and Inferential Imper-
 546 fective, §21.5) and Modal (Irrealis, Imperative, Prohibitive, Dubitative, §21.4) cat-
 547 egories.

548 In the finite TAME categories, the B-type preverbs are found in the Imper-
 549 fective (§21.2) and the A-type preverbs in the Imperative (§21.4.2.1), the Irrealis

(§21.4.1.1) and the Aorist (§21.5.1), though with slightly different vowel contraction rules (§12.3). In the Aorist paradigm of transitive verbs, another series of preverbs (C) is found in the direct 3→3' forms (§2.4.2.2), based on the A-type preverbs but with -a vocalism instead of -u and -v (originating from fusion with another prefix, §15.1.1.3). For instance, the 2PL→3 Aorist of *ndza* ‘eat’ is *tx-tu-ndza-nuu* (AOR:UP-2-eat-PL ‘you_{pl} ate it’) with the UPWARDS A-type *tx-* preverb, but the corresponding 3PL→3' form is *ta-ndza-nuu* (AOR:3→3':UP-eat-PL ‘they ate it’) with the C-type preverb *ta-*. It is the only case when an orientation preverb encodes person in addition to TAME.

The Inferential (§21.5.2) has a series of preverbs (series D) based on series B, but with -o and -v vocalism instead of -u and -u, respectively (§15.1.1.3). For instance, the UPWARDS and DOWNWARDS D-type preverbs are *to-* and *pjv-*, corresponding to the B-type *tu-* and *pjuu-*, respectively (§15.1.1.1).

Five TAME categories neutralize the orientation contrast, and require the same marker for all verbs: the Sensory evidential *nju-* (§21.3.2), from the B-type WESTWARDS preverb (Table 2.7), the Egophoric Present *ku-* (§21.3.3), the Dubitative *ku-* (§21.4.4), from the B-type EASTWARDS preverb, the Past Imperfective *pui-* from the A-type DOWNWARDS preverb (§21.5.3.1, Lin 2011), and the Inferential Imperfective *pjv-* from the D-type DOWNWARDS preverb (§21.5.3.1).

In addition to orientation preverbs, TAME categories are marked by several morphological exponents, including stem alternations (§12.2), allomorphy of negative prefixes (§13.1.1) and additional affixes: the Irrealis *a-* prefix (§11.2.1) and the Past transitive *-t* suffix (§11.3).

In the Non-Past, Imperfective and Modal categories (all except Past), transitive alternating verbs have a specific stem in direct configurations with a singular subject (see Table 2.5 above and §12.2.2). Another stem is found in the Aorist of a handful of verbs (§12.2.1).

Some of the primary categories can be combined with the copula *ŋu* ‘be’ to form periphrastic TAME categories (§21.2.2), for instance the Periphrastic Past Imperfective (§21.5.3.5) illustrated in (19), built from the Imperfective (*tu-ndze-a*, with the B-type UPWARDS preverb *tu-*, the alternating stem *ndze* from *ndza* ‘eat’ and the 1SG suffix) and the Past Imperfective of the copula *pui-ŋu*.

- (19) *tx-mt^hum tu-ndze-a pui-ŋu*
 INDEF.POSS-meat IPFV-eat[III]-1SG PST.IPFV-be
 ‘I was eating meat/I used to eat meat.’

In addition, primary TAME categories can be combined with prefixes expressing secondary aspectual (§21.6) or modal (§21.7) meanings.

2 A grammatical sketch

586 There is a robust contrast between Past and Non-Past tenses in Japhug, but no
587 grammaticalized future tense. Future events in main clauses are mainly expressed
588 by the Factual Non-Past (§21.3.1.2) or the Irrealis (§21.4.1.2).

589 The tripartite evidential system between Egophoric Present, Sensory (or Testi-
590 monial) and Factual observed in the non-past is structurally very similar to that
591 found in some Tibetic languages (Tournadre 2008; Hill & Gawne 2017).

592 2.4.3.3 Stative vs. dynamic verbs

593 TAME morphology presents a contrast between *stative* and *dynamic* verbs. In
594 the Imperfective (§21.2.6), the Aorist (§21.5.1.3) and the Inferential (§21.5.2.4), sta-
595 tive verbs have an inchoative meaning, different from their meaning in Non-Past
596 tenses.

597 For instance, the verb *zri* ‘be long’ means ‘become long(er)’ in the Imperfective
598 (*tu-zri* IPFV:UP-be.long ‘it becomes longer’) or the Aorist (*tr-zri* AOR:UP-be.long
599 ‘(when) it became longer’). On the other hand, in the Sensory (*nu-zri* SENS-be.long
600 ‘it is long’) and the other Non-Past tenses, it retains its basic stative meaning.

601 Stative verbs also differ from most dynamic verbs in being compatible with
602 Past Imperfective and Inferential Imperfective in all contexts (*pui-zri* PST.IPFV-
603 be.long ‘it was/used to be long’), while dynamic verbs generally require the pe-
604 ripheralastic Past Imperfective instead (§21.5.3.5), except in some limited contexts
605 (§21.5.3.4).²

606 The stative/dynamic contrast is not completely independent from transitivity
607 (§14.3.1). Only *intransitive* stative verbs have a distinctive morphological marking:
608 the *kuu-* infinitive appears in some contexts (§16.2.1.1). Transitive stative verbs
609 include in particular verbs derived from adjectival stative verbs by the tropative
610 derivation (§17.5.2).

611 2.4.4 Non-finite verb forms

612 Finiteness can be defined in Japhug by the ability of a given verb form to occur
613 in the person indexation paradigms (§2.4.2). Non-finite verbs forms cannot take
614 indexation affixes, though some of them can mark the person and number of
615 at most *one* argument by means of possessive prefixes like nouns (§2.3.4.1). The
616 distinction between finite and non-finite verbal forms is categorical: there are
617 no intermediate semi-finite forms, unlike in Situ (Sun & Lin 2007) where some
618 participles take person indexation in specific contexts.

²This criterion is however not absolute, since a few atelic dynamic verbs can occurs in the non-peripheralastic Past Imperfective (§21.5.3.1).

619 The main verb of a complete sentence has to be in a finite form, and non-finite
 620 verbs are restricted to subordinate clauses (including relative and complement
 621 clauses).

622 2.4.4.1 Participles

623 There are three types of participle in Japhug: subject, object and oblique, respec-
 624 tively marked by the prefixes *ku-* (20a), *kṛ-* (20b) and *sṛ/z-* (20c). They are fully
 625 productive, and only a handful of defective verbs lack participles (§14.2.2, §14.3.4).

- 626 (20) a. *nx-kuu-qur*
 2SG.POSS-SBJ:PCP-help
 ‘(The one/someone) who helps you.’
- 627 b. *nx-kṛ-qur*
 2SG.POSS-OBJ:PCP-help
 ‘(The one/someone) that you help.’
- 628 c. *a-sṛ-t^hu*
 1SG.POSS-OBL:PCP-ask
 ‘The (person) whom I ask.’

632 Participles can take a possessive prefix (§16.1.1.1, §16.1.2.1, §16.1.3.3), marking
 633 either the subject (20b and 20c) or the object (20a).

634 Participles can in addition be combined with negative, orientation and associ-
 635 ated motion prefixes (§16.1.1.2, §16.1.2.2), as shown by (21).

- 636 (21) *uu-mṛ-pjui-kuu-nui-fkaβ*
 3SG.POSS-NEG-IPFV:DOWN-SBJ:PCP-AUTO-cover
 ‘The one/those who do(es) not cover it.’ (from example 20, §16.1.1.2)

638 The main function of participles is to build (participial) relative clauses (§23.2.1).
 639 Participial clauses can relativize core arguments (§16.1.1.4, §16.1.2.4) and various
 640 oblique arguments and adjuncts (§16.1.1.5, §16.1.2.4, §16.1.3.5, §16.1.3.6, §16.1.3.7).

641 In particular, the Japhug equivalent of attributive adjectives are adjectival sta-
 642 tive verbs in subject participle form (§9.1.8.3, §23.5.1), occurring in generally head-
 643 internal (§23.4.3.2) relative clauses as in (22).

- 644 (22) *tc^heme kuu-mpcṛ*
 girl SBJ:PCP-be.beautiful
 ‘A/the beautiful girl.’

2 A grammatical sketch

646 The subjects of both intransitive (§23.5.1) and transitive (§23.5.2) verbs are relativized by means of a participial relative clause in *ku-*. Subject participles of
647 transitive verbs take an obligatory possessive prefix coreferent with the object
648 (unless another prefix is present) as in (20a) and (23a), while those of intransitive
649 verbs lack possessive prefixes as in (23b),³ except in very restricted cases
650 (§16.1.1.1).

652 (23) a. *ui-kuu-rxt*

653 3SG.POSS-SBJ:PCP-write

654 ‘The one who writes it.’

655 b. *kuu-ry-rxt*

656 SBJ:PCP-APASS-write

657 ‘The one/someone who writes things, a writer.’

658 Another important function of participles is to build the purposive complements of motion verbs (§16.1.1.6, §24.4.2.1, §15.2.10), as in (24) (see also 27b in
659 §2.4.5 below).

660 (24) *a-kuu-rto&* *jy-ye*

661 1SG.POSS-SBJ:PCP-look AOR-come[II]

662 ‘S/he came to see me.’

663 Participles have several additional morphosyntactic functions, presented in
664 §24.4.2.

665 2.4.4.2 Infinitives and converbs

666 The infinitives in *ku-* and *ky-*, called “velar infinitives” in this grammar, serve as
667 the citation forms of verbs (§16.2.1.4). They occur in some complement clauses
as in (25) (§16.2.1.5, §24.2.1) and also serve as converbs (§16.2.1.7, §25.4.2). They
668 are easily confused with subject or object participles (§16.2.1.1).

669 (25) *ky-ta&* *rga-a*

670 INF-weave like:FACT-1SG

671 ‘I like to weave.’

672 In addition to velar infinitives, two other types of infinitives are attested: the
673 bare (§16.2.2) and the dental (§16.2.3) infinitives. These forms are only used in

³The verb *rxt-rxt* in (23b) is the antipassive derivation (§18.6.1) from *rxt* ‘write’ (23a).

the complement clauses of a handful of verbs such as *za* ‘start’ (§24.2.2, §24.5.6, §24.5.1.3). Bare and dental infinitives are in complementary distribution (§14.3.1): the former is found with transitive verbs (26a), and the latter with intransitive ones (26b).

- (26) a. *uu-ndza* *to-za*
 3SG.POSS-BARE.INF:eat IFR:UP-start
 ‘S/he/it started eating it.’
- b. *tui-rjaꝝ* *pjy-za*
 INF:II-dance IFR:DOWN-start
 ‘S/he started dancing.’

In this construction (and a few other ones), the complement-taking verb takes the orientation that is lexically selected by the verb in the complement clause (§24.3.5), for instance UPWARDS like *ndza* ‘eat’ in (26a) and DOWNWARDS like *rjaꝝ* ‘dance’ in (26b).

In addition to the infinitives, three converbs are attested: the reduplicated gerund *sy-* (§16.6.1) expressing temporal simultaneity (§25.3.4.2), the purposive converb (§16.6.2, §25.5.4) and the converb of immediate subsequence (§16.6.3, §25.3.3.2), which stands out in having a perfective meaning ‘as soon as ...’ (for instance *pju-tui-mto* ‘as soon as X saw Y’) while selecting the B-type preverbs which usually mark Imperfective and Non-Past tenses. Despite the existence of these converbs, temporal (§25.3), manner (§25.4) and causal (§25.5) subordinate clauses mainly select finite verb forms in Japhug narratives and conversations.

2.4.4.3 Other nominalizations

Several productive abstract nominalizations are found in Japhug. The degree nominals (§16.3), combining a *tu-* with a possessive prefix coreferent with the subject (for example *a-tu-mtsur* 1SG-NMLZ:DEG-be.hungry ‘my degree of hunger’), are highly common and occur in degree and equative constructions (§26.1.2).

Action nominals (§16.4.1) and abstract nouns (§16.4.2) can be formed by prefixation of *tu-* and *ty-*, for instance the noun *tu-rjaꝝ* ‘dance’ from the intransitive verb *rjaꝝ* ‘dance’, and *ty-mtsur* ‘hunger’ from *mtsur* ‘be hungry’. These derivations are not rare, but not fully productive either. The *tu-* and *ty-* prefixes here are not analyzable as indefinite possessor prefixes with which they are homophonous (§5.1.1), as they cannot be replaced by definite possessor prefixes.

703 2.4.5 Associated motion

704 Japhug and other Gyalrong languages stand out in Trans-Himalayan in having a
 705 system of associated motion clearly different from orientation markers (Jacques
 706 et al. forthcoming). Unlike Arandic (Koch 1984) or Tacanan (Guillaume 2009), the
 707 category of associated motion in Japhug only comprises two different prefixes
 708 (§15.2.1) marking either cislocative or translocative motion of the subject (§15.2.2)
 709 prior to the action expressed by the verb root.

710 Although associated motion prefixes (27a) seems at first glance semantically
 711 similar to motion verbs with a purposive clause (27b), there are systematic dif-
 712 ferences between these two constructions (§15.2.10), both in terms of presupposi-
 713 tions (§15.2.10.1) and in syntactic constraints of relativization (§15.2.10.6).

- 714 (27) a. *c-tr-χtui-t-a*
 TRAL-AOR-buy-PST:TR-1SG
 'I went and bought it.'
 715 b. *wi-kui-χtui* *jy-ari-a*
 3SG.POSS-SBJ:PCP-buy AOR-go[II]-1SG
 'I went to buy it.'

718 2.4.6 Voice

719 2.4.6.1 Overview

720 The rich and redundant morphological expression of transitivity (§14.3.1) and the
 721 rarity of labile verbs (§14.5) in Japhug are correlated with a highly productive
 722 system of voice derivations, treated in chapters 17, 18 and 19. There are eleven
 723 fully productive valency-changing prefixes,⁴ summarized in Table 2.8, to which a
 724 certain number of non-productive derivations such as the applicative *nu-* (§17.4)
 725 and the anticausative (§18.5) can be added.

726 All productive voice derivations are marked by prefixes (§11.2.2). Only fossil
 727 traces of derivational suffixes are found (in particular the applicative *-t*, §19.7.2).
 728 The anticausative is marked not by a prefix, but by an alternation whereby un-
 729 voiced obstruents are converted into their voiced prenasalized counterparts (see
 730 §18.5.1).

731 There are in addition productive verbal derivations that do not change valency,
 732 such as the autive *nu-* (§19.1) and the distributed action derivation (§19.4).

⁴These derivations are not fully productive in the sense that they can be applied to any verb (since there are transitivity and semantic restrictions on their uses), but in the sense that some recent loanwords can be subjected to them.

Table 2.8: Productive valency-changing verbal derivations in Japhug

Voice	Prefix	Section
Sigmatic causative	<i>sui(y)-/z-</i>	§17.2
Velar causative	<i>yṛ-</i>	§17.3
Tropative	<i>nr(y)-</i>	§17.5
Passive	<i>a-</i>	§18.1
Reciprocal	<i>a-+reduplication</i>	§18.4.1
Reflexive	<i>zjṛ-</i>	§18.3
Antipassive	<i>rṛ-</i>	§18.6.1
	<i>sṛ-</i>	§18.6.2
Proprietive	<i>sṛ-</i>	§18.1
Facilitative	<i>yṛ-</i>	§18.9.1
	<i>nuuyu-</i>	§18.9.2

733 The following sections present a representative sample of voice derivations
 734 and their main morphosyntactic functions.

735 2.4.6.2 Causative

736 There are two productive causative derivations, the sigmatic causative (which
 737 has four productive allomorphs *sui-*, *suy-*, *s-* and *z-* depending on the phonological
 738 and morphological context, §17.2.1) and the velar causative *yṛ-* (from *wṛ-*, a form
 739 still found in some Japhug dialects).

740 The latter is restricted to a subset of stative verbs. Some stative verbs are
 741 compatible with both causative derivations: for instance *zbaṛ* ‘be dry’ can be
 742 causativized as both *yṛ-zbaṛ* or *sui-zbaṛ*. The semantic contrast between the two
 743 causatives in this context remains unclear (§17.3.3.2).

744 The sigmatic causative is the most productive derivation in Japhug. It is com-
 745 patible with intransitive, transitive and even ditransitive verbs (§14.4.3), and has
 746 a wide range of meanings (§17.2.5), from coercion (§17.2.5.2) as in (28) to indirect
 747 causation (§17.2.5.6).

- 748 (28) *rṛṣlpu kui ui-ma nuu mk^byrmay ra tu-z-nyme*
 king ERG 3SG.POSS-work DEM people PL IPFV-CAUS-do[III]
 749 *pjṛ-ηu*
 IFR.IPfv-be
 750 ‘The king used to make the people do work for him.’

751 The sigmatic causative is also used to mark instruments (§17.2.5.8), for instance
 752 in (29), where the instrument *taqaβ* ‘needle’ receives ergative marking (§8.2.2.4)
 753 like a causee (§8.2.2.6): the construction literally means ‘s/he made the needle
 754 sew the clothes’.

- 755 (29) *ki taqaβ ki kuu tuu-ηga cʰy-suu-tṣuiβ*
 DEM.PROX needle DEM.PROX ERG INDEF.POSS-clothes IFR-CAUS-sew
 756 ‘S/he sewed the clothes with this needle.’

757 In addition to the productive causatives, there are irregular causative forms
 758 (§17.2.2, §17.3.1), some of which co-exist with their regular counterparts, but with
 759 a more lexicalized meaning. For instance, the verb *tsʰi* ‘drink’ has the irregular
 760 causative *jtsʰi* ‘give to drink’ (§17.2.2.5) as opposed to the regular one *su-tsʰi* ‘make
 761 drink, drink with’.

762 The sigmatic causative prefix can be combined with nearly all other derivational
 763 prefixes (§17.2.8). It can precede the velar causative, as in *z-yṛ-mpja* ‘heat
 764 up X with Y, make/let Y heat up X’ from *yṛ-mpja* ‘heat up’, causative of *mpja* ‘be
 765 warm’.

766 It is also the only prefix that can occur more than once in a single verb form,⁵
 767 as shown by examples such as *sui-sui-spoꝝ* ‘make a hole with’ from *sui-spoꝝ* ‘make
 768 a hole’, causative of the intransitive verb *spoꝝ* ‘have a hole’ (§17.2.7).

769 2.4.6.3 Tropative

770 The tropative *nṛ-* prefix (§17.5), like a causative derivation, turns an intransitive
 771 verb into a transitive, but its meaning differs: the added argument is not a causer,
 772 but an experiencer feeling/perceiving the state expressed by the base verb. For
 773 instance, the tropative of *mpcyr* ‘be beautiful’ is *nṛ-mpcyr* ‘find beautiful’, with
 774 the experiencer encoded as subject and the stimulus (corresponding to the
 775 intransitive subject of the base verb) as object, as shown by (30).

- 776 (30) *nuu-ta-nṛ-mpcyr*
 SENS-1→2-TROP-be.beautiful
 777 ‘I find you very beautiful.’

778 The tropative can be used to define *adjectives* as a sub-class of stative verbs:
 779 only adjectival stative verbs can undergo this derivation, unlike for example ex-
 780 istential verbs and copulas (§22.5).

⁵ A double reciprocal form is attested (§18.4.2.5), but not with the same reciprocal prefixes.

781 2.4.6.4 Antipassive

782 When the object of a morphologically transitive verb (thus excluding labile verbs
 783 in intransitive conjugation, §14.5) is non-overt, it is necessarily interpreted as
 784 definite (§22.1.2.1). For instance, example (31a) can only be used if the referent that
 785 has been sewn has been previously mentioned or is retrievable from the context,
 786 and cannot be understood as ‘sewed something’ with an indefinite object. To
 787 express this meaning, several strategies are possible, including the antipassive
 788 *ry-* derivation (§18.6.1).

- 789 (31) a. *tc^heme nuu kuu c^hy-tṣuiβ*
 girl DEM ERG IFR-sew
 ‘The girl sewed it.’
 790 b. *tc^heme nuu c^hy-ry-tṣuiβ*
 girl DEM IFR-APASS-sew
 791 ‘The girl sewed (something) / did sewing.’

793 The *ry-* turns a transitive verb into an intransitive one, whose only argument is
 794 semantically the agent, but does not take ergative marking (31b).

795 2.4.6.5 Reflexive and reciprocal

796 Japhug has a dedicated reflexive prefix *zyy-* (§18.3), different from other valency-
 797 decreasing derivations. The reflexive verb is conjugated intransitively, as shown
 798 by (32)⁶

- 799 (32) *t^hu-zyy-ruk-a*
 AOR:DOWNTSTREAM-REFL-put.in-1SG
 800 ‘I put myself (in the bag).’

801 The reflexive is frequently combined with the sigmatic causative (§18.3.4) to
 802 express an unintentional indirect causation affecting oneself (33).

- 803 (33) *ty-zyy-su-mpca-a*
 AOR-REFL-CAUS-scold-1SG
 804 ‘I got myself scolded.’

⁶If the verb in (32) were transitive, a past transitive -*t* suffix would be inserted (§11.3, §14.3.2.1) and the expected form would be †*t^hu-zyy-ruk-t-a*.

2 A grammatical sketch

805 The reciprocal derivation (§18.4.1), entirely different from the reflexive, is built
806 by prefixing *a-* and reduplicating the verb stem (§4.1). For instance the transitive
807 verb *rqoꝝ* ‘hug’ yields *a-rqu~rqoꝝ* ‘hug each other’. Reciprocal verbs generally
808 require a non-singular intransitive subject, and can also select a comitative post-
809 positional phrase (§8.2.5).

810 2.4.6.6 Autive

811 The Autive *nui-* (§19.1) is a highly productive derivation, which does not affect
812 verbal transitivity unlike the previous ones (§19.1.1).

813 Its most basic function is self-affectedness or autobenefactive (§19.1.3). In par-
814 ticular, the autive on transitive verbs taking a inalienably possessed object can
815 be used to specify that the subject and the possessor of the object are coreferent
816 (34a), whereas the absence of the autive is generally interpreted as indicating the
817 absence of coreference (34b). This is not an absolute syntactic rule however, since
818 the Autive has additional unrelated uses (see below and §19.1.4, §19.1.5) which can
819 interfere with this particular function.

- 820 (34) a. *wuzo kuu wi-sroꝝ ko-nui-ri*
 3SG ERG 3SG.POSS-life IFR-AUTO-save
 ‘S/he_i saved his/her_i own life.’
821 b. *wuzo kuu wi-sroꝝ ko-ri*
 3SG ERG 3SG.POSS-life IFR-save
 ‘S/he_i saved his/her_j life.’

824 Another function of the Autive is to indicate spontaneous or non-volitional
825 actions (§19.1.4), occurring for example by mistake, as illustrated by the minimal
826 pair between (35a) and (35b).

- 827 (35) a. *tx-rye pui-nui-prat-a*
 INDEF.POSS-necklace AOR-AUTO-break-1SG
 ‘I broke the pearl necklace (by mistake).’
828 b. *tx-rye pui-prat-a*
 INDEF.POSS-necklace AOR-break-1SG
 ‘I broke the pearl necklace (on purpose).’

831 The third main function of the Autive is to express permansive aspect (§19.1.5).

832 **2.4.7 Denominal derivations**

833 Verbalizing denominal (chapter 20) and deideophonic (§20.9) derivations are rich
 834 and productive in Japhug.

835 A considerable number of denominal prefixes can be identified. Some of them
 836 have a well-identifiable meaning, for instance the proprietive *ayu-* (§20.2.4) deriv-
 837 ing verbs meaning ‘having a lot of *X*’ or ‘producing a lot of *X*’ (such as *ayulu* ‘pro-
 838 ducing a lot of milk’ (of a cow) from *tr-lu* ‘milk’) or the similative *aru-* (§20.2.2).
 839 For the prefixes *ru/r-* (§20.4), *nu/r-* (§20.7) and *yuu/r-* (§20.5), several different
 840 functions have to be postulated, since these prefixes can derive both intransitive
 841 (§20.4.1, §20.7.1, §20.5.1) and transitive (§20.4.2, §20.7.2, §20.5.2) verbs.

842 Some denominal derivations occur in pairs (§20.7.3, §20.4.3). For instance, when
 843 a noun has both *ru/r-*- and *nu/r-*- denominal verbs, the former is usually dynamic
 844 intransitive, and the latter transitive, as illustrated by the pair comprising the in-
 845 transitive verb *ry-ma* ‘do (some) work’ and its transitive counterpart *ny-ma* ‘do
 846 (a work)’, both from the noun *ta-ma* ‘work’.

847 Denominal derivations compete with light verb constructions (§20.1.2, §22.4).
 848 For instance, the meaning ‘tell lies, cheat’ from the noun *k^hramba* ‘lie’ can be
 849 expressed either by a collocation with the light verb *βzu* ‘make’ (§22.4.2.1) or by
 850 the denominal verbs *ruk^hramba* ‘tell lies’ (§20.4.1, intransitive) and *nuk^hramba*
 851 ‘cheat’ (§20.7.2, transitive).

852 An important proportion of voice prefixes originate from the reanalysis of
 853 denominal derivations from bare nominalized forms (§20.10), most clearly in the
 854 case of the *r-* antipassive (§20.10.1, Jacques 2014b).

855 When applied to noun-verb compounds (§5.5.5, §16.4.7), denominal deriva-
 856 tions can serve to build incorporating verbs (§20.13.1). For instance, the intransitive
 857 verb *yusup^hut* ‘cut firewood’ is derived by the prefix *yuu-* (§20.5.1) from
 858 the compound *sup^hut* ‘cutting firewood’, itself made from the *status constructus* *suu-*
 859 of the noun *si* ‘wood’ compounded with the transitive verb *p^hut* ‘take
 860 off’, ‘cut’. A tripartite contrast exists between the basic transitive construction
 861 (*si + p^hut*), a light verb construction with the corresponding action nominal com-
 862 pound (*sup^hut + βzu*) and the denominal incorporating verb *yuu-sup^hut*, all three
 863 meaning ‘cut firewood’ (§20.13.4).

864 **2.5 Core and oblique arguments**

865 The morphosyntactic properties of arguments can be studied from the point of
 866 view of flagging (§8, §8.2, §8.3) and indexation (§14.2, §14.3.2), but also relativiza-

867 tion (§23.5) and coreference restrictions between complement and matrix clauses
868 (§24.2).

869 Core arguments are defined as those that are indexed by the verb morphology.
870 In the case of intransitive verbs (§14.2), the only argument indexed on the verb
871 is the *intransitive subject*, but the argument structure of intransitive verbs can
872 contain up to two additional oblique arguments (§14.2.5). Morphologically trans-
873 itive verbs index two arguments (including in some cases a dummy one, §14.3.5).
874 Although there are no different morphological slots for transitive subjects and
875 objects (§2.4.2.2, §14.3.2.8), the transitive paradigm contains no ambiguity in per-
876 son configurations (§14.3.2), and the person of the agentive and patientive core
877 arguments can always be clearly identified in finite verb forms. The core argu-
878 ment indexed like the agentive argument of verbs of action such as *sat* ‘kill’ or
879 *bindu* ‘hit’ (as in §2.4.2.2) is called *transitive subject*, and the other one is the *ob-*
880 *ject*.⁷

881 Outside of verb indexation, the three basic core arguments (intransitive sub-
882 ject, transitive subject and object) are encoded in various ways, and present dif-
883 ferent types of alignments.

884 2.5.1 Neutral alignment

885 Person indexation affixes in general have neutral alignment: for instance the 1SG
886 suffix *-a* indexes the subject of intransitive verbs, and is also found in 1SG→3,
887 3→1SG and 2→1SG configurations (§2.4.2.2, §14.3.2.8).

888 The absence of strict coreference restrictions between matrix and subordinate
889 clauses in some categories of complement clauses (§24.2.1.2, §24.5.6.1, §24.2.3.2)
890 and in manner (§25.4.2) and temporal clauses (§25.3) could be interpreted as a
891 type of neutral alignment, but it appears that the neutralization in those cases is
892 not limited to the three core arguments: there can also be complete absence of
893 coreference, or coreference with an oblique or a possessor of an argument.

894 2.5.2 Nominative-accusative alignment

895 2.5.3 Subjecthood

896 Nominative-accusative alignment appears in several unrelated constructions in
897 Japhug.

898 The first piece of evidence for this type of alignment in Gyalrong languages
899 to have been proposed (Sun 2003) is the fact that the *ku-* (subject) participle

⁷The term *object* in this grammar is restricted to this particular core argument, to the exclusion of all object-like patientive arguments.

(§16.1.1.4) is the only form that can be used to relativize both intransitive (§23.5.1) and transitive subjects (§23.5.2). However, the *ku-* participles are not exclusively used to relativize intransitive and transitive subjects: they can also relativize possessors of intransitive subjects (§23.5.10), and are the only option to do so, resulting in ambiguities (see examples 175 and 176 in §22.5.2.1).

The fact that nearly all labile verbs are subject-preserving (§14.5.1.3) could also be adduced as evidence of nominative-accusative alignment, but the existence of a handful of object-preserving labile verbs (§14.5.1.4) makes it less compelling.

Clearer cases of constructions where strict nominative-accusative alignment is observed include associated motion and complementation.

First, the argument performing the motion encoded by the associated prefixes (§15.2.1) is always the intransitive subject in the case of intransitive verbs, and the transitive subject in the case of transitive ones (§15.2.2), and can never be the object, a possessor of the subject or any oblique argument (but it can be the causee of a causative verb).

Second, several subtypes of complement clauses require coreference between the (intransitive or transitive) subjects of the complement clause and that of the main clause, in particular bare and dental infinitives (§24.2.2.2).

2.5.4 Objecthood

While evidence for *subjects* independent from person indexation can be identified, *objects* (as opposed to other non-subject arguments in absolute form, §8.1.5, §8.1.6, §8.1.8) are more elusive.

In subject participles of transitive verb, the object is marked by a possessive prefix (§16.1.1), obligatorily if no other prefix (of orientation, negation or associated motion) is present, as in (36b).

- (36) a. *spjan̥kui nuu kuu ca nuu-ndze*
 wolf DEM ERG meat SENS-eat[III]
 ‘The wolf eats meat.’
- b. *uu-kuu-ndza*
 3SG.POSS-SBJ:PCP-eat
 ‘(the one/someone) who eats it’

However, possessive prefixes on subject participles cannot be used as evidence for objects outside of finite indexation, as they can mark other grammatical functions. For example the verb *rga* ‘like’ is conjugated intransitively as shown by (37b): its subject *spjan̥kui* has no ergative marking, and no stem alternation is

933 observed on the verb (a form like *†nui-rge* would be expected if this verb were
 934 transitive as in 36a, §12.2.2.1, §14.3.1). However, in addition to its subject, this
 935 verb takes an absolute argument (*ca* ‘meat’ in 37a) that cannot be indexed: the
 936 *semi-object*. This argument is also marked as a possessive prefix on the subject
 937 participle like a real object, as in (37b).

- 938 (37) a. *spjan̥kua nu ca nui-rga*
 wolf DEM meat SENS-like
 939 ‘The wolf likes meat.’
 940 b. *u-kui-rga*
 3SG.POSS-SBJ:PCP-like
 941 ‘(The one/someone) who likes him/her/it.’

942 Moreover, objects do not have any relativization construction that is specific to
 943 them. They can be relativized by object participial relatives (§16.1.2.4) and finite
 944 relatives (§23.2.2), but these categories of clauses can also be used to relativize
 945 semi-objects (§23.5.4.1, §16.1.2.5) and other participants such as goals (§23.5.5.2,
 946 §23.5.5.1) and possessors of objects (§23.5.10). For instance, headless participial
 947 clauses relativizing the object of *ndza* ‘eat’ (38a) or the semi-object of *rga* ‘like’
 948 (38b) have the same structure.

- 949 (38) a. *a-ky-ndza*
 1SG.POSS-OBJ:PCP-eat
 950 ‘(The things) that I eat.’
 951 b. *a-ky-rga*
 1SG.POSS-SBJ:PCP-like
 952 ‘(The things) that I like.’

953 2.5.5 Absolutive-ergative alignment

954 Although the terms “absolutive” (§8.1) and “ergative” (§8.2.2) are used in this
 955 grammar to refer to flagging, Japhug does not display perfect absolutive-ergative
 956 alignment in case marking.

957 Absolutive form (absence of postposition or relator noun) does indeed serve
 958 to mark intransitive subjects (§8.1.1) and objects (§8.1.3) by default, and transitive
 959 subjects normally take the ergative *kui* postposition (§8.2.2.1). However, both ab-
 960 solutive (§8.1.5, §8.1.7, §8.1.8) and ergative forms (§8.2.2.4, §8.2.2.7) have many
 961 functions other than marking core arguments. In addition, there is some fluid-
 962 ity in the use of the ergative postposition: some intransitive subjects can also be

marked by it (§8.2.2.3), in particular due to anticipation of a transitive verb in the following clauses (§8.2.2.2).

The clearest evidence of absolutive-ergative alignment in Japhug is found in generic person indexation (§14.3.2.5): generic intransitive subjects and object are both indexed by *kua-*, while generic transitive subjects are marked by the inverse *wy-* (§14.3.2.8).

In addition, in local configurations (§14.3.2.3), the fact that the suffix closest to the verb stem indexes the object (like an intransitive subject) can also be analyzed as ergative alignment in this sub-part of the indexation system.

There is no case of syntactic pivot with exclusive neutralization of intransitive subject and object in complementation or relativization.

2.5.6 Ditransitive verbs

Most ditransitive verbs have indirective alignment (§14.4.1): the theme is indexed (treated as the object of a monotransitive verb), and the recipient marked with the genitive (§8.2.3) or the dative (§8.3.1). There are however a few highly common verbs such as *mbi* ‘give’ which have secundative alignment (§14.4.2) and index the recipient.

Causativized transitive verbs have a different indexation pattern: either the causee or the patientive argument is indexed as object, depending on factors such as person hierarchy (§14.4.3).

2.6 Word order

Japhug has a strict verb-final order, with only a limited number of exceptions: right dislocated constituents (§22.1.3), only a few adverbs, particles (§10.4) and ideophones (§10.1.7) can occur postverbally (§22.2.7).

When both the subject and the object of a monotransitive verb are overt as in (39), the former is placed by default before the latter (§22.1.1.2). For ditransitive verbs, the order between theme and recipient is not rigid (§22.1.1.3, §22.1.1.5).

- (39) *lulū nū kua pya nū to-ndza*
 cat DEM ERG bird DEM IFR-eat
 ‘The cat ate the bird.’

Noun phrases have by default (Demonstrative)-Noun-Adjective-Numeral-Demonstrative order (§9.3) as illustrated by (40).

- 994 (40) (*kuki*) *tc^heme kuu-mpcyr* *χsum kura*
 DEM.PROX girl SBJ:PCP-be.beautiful three DEM:PL
 995 ‘These three beautiful girls.’

996 2.7 Subordination

997 2.7.1 Relative clauses

998 Japhug lacks relative pronouns, and most relative clauses are participial (§23.2.1).
 999 Finite relative clauses are also attested (§23.2.2).

1000 Most arguments and adjuncts are relativizable, though there are constraints
 1001 on relativizability (§23.5.12).

1002 In the text corpus, an important proportion of relative clauses are headless
 1003 (§23.4.1). When the head noun is overt, it is either internal to the relative clause
 1004 (§23.4.3) or follows it (§23.4.2), depending in part on the syntactic function of the
 1005 relativized element and on the type of relative clause.

1006 Example (41) illustrates a head-internal finite relative: the relativized object *pya*
 1007 ‘bird’ is located between the transitive subject *lulu nuu kuu* and the finite verb (an
 1008 object participle *tx-ky-ndza* (AOR-OBJ:PCP-eat) would also be possible to express
 1009 the same meaning), at the position it would normally occupy in the correspon-
 1010 ding independent sentence (see 39 above).

- 1011 (41) [*lulu nuu kuu pya ta-ndza*] *nua*
 cat DEM ERG bird AOR:3→3'-eat DEM
 1012 ‘The **bird** that the cat ate’

1013 In (42) on the other hand, the relative clause precedes the relativized transitive
 1014 subject *lulu* ‘cat’.

- 1015 (42) [*pya u-tx-kuu-ndza*] *lulu nuu*
 bird 3SG.POSS-AOR-SBJ:PCP-eat cat DEM
 1016 ‘The **cat** that ate the bird’

1017 2.7.2 Complement clauses

1018 Complement clauses in Japhug (chapter 24) occur in intransitive subject (43a,
 1019 §24.5.8), object (43b, §24.5.3.4) and semi-object (43c, §24.5.3.5) functions. There
 1020 are also complement-taking nouns (43d, §24.6).

- 1021 (43) a. [*kʰramba kx-βzu*] *mx-pe*
 lie INF-make NEG-be.good:FACT
 ‘Telling lies is bad.’
- 1022 b. [*uizo kuu* [*kʰramba kx-βzu*] *mx-spe*]
 3SG ERG lie INF-make NEG-be.able[III]
 ‘S/he is not able to tell lies.’
- 1023 c. [*uizo kuu kʰramba kx-βzu*] *mx-nyz*
 3SG ERG lie INF-make NEG-dare
 ‘S/he does not dare to tell lies.’
- 1024 d. [*kʰramba kx-βzu*] *a-βjiz* *mx-yi*
 lie INF-make 3SG.POSS-wish NEG-come:FACT
 ‘I do not want to tell lies.’

1025 As shown by (43c), when the complement-taking verb is semi-transitive (and
 1026 thus morphologically intransitive, §14.2.3), the verb in the complement clause is
 1027 transitive and they share their subjects, the subject can take ergative case follow-
 1028 ing the verb in the complement clause rather than absolute (§24.2.1.1).

1029 Not all complements are infinitive clauses as in (43) (§24.4.2, §24.2.1). Some
 1030 verbs are also compatible with finite complements (§24.2.3) as in (44), with sub-
 1031 ject coreference.

- 1032 (44) [*pjur-ta-suixcyt*] *nui-spe-a*
 IPFV-1→2-teach SENS-be.able[III]-1SG
 ‘I am able to teach you.’

1033 Verbs of speech also take reported speech clauses (§24.2.5), which present mor-
 1034 phosyntactic properties different from regular finite complements (§24.2.5.2).

1035 Aside from complement clauses proper, various complementation strategies
 1036 are also found, including relative clauses in core argument function (which re-
 1037 semble, and can even be ambiguous with, complement clauses, §24.4.1), particip-
 1038 ial clauses (§24.4.2), action nominals (§24.4.3) and simple coordination (§24.4.4).

1040 2.7.3 Other subordinate clauses

1041 Subordinate clauses other than relative and complement clauses (treated in chap-
 1042 ter 25) tend to be expressed by finite clauses headed by a relator noun or a post-
 1043 position. For instance, clauses of temporal precedence (§25.3.2.1) require a finite
 1044 verb in the Imperfective regardless of the TAME category of the verb in the main
 1045 clause (§21.2.3) followed the postposition *cunŋgu* ‘before’ (§8.2.11) as in (45).

2 A grammatical sketch

- 1050 (45) [c^har-sta-nuu cuŋgwi] tce, uzo c^hy-rryu
 IPFV-wake.up-PL before LNK 3SG IFR-get.up
 1051 ‘S/he got up before they had woken up.’

1052 Converbial clauses do exist (§16.6), but are all in competition with a finite
 1053 clause type. For instance, the immediate converb (§16.6.3) illustrated in (46a) has
 1054 a corresponding construction (46b) with a finite verb in the Aorist (§25.3.3.2).

- 1055 (46) a. tu-tui-łob
 IPPV:UP-IMM:CONV-come.out
 1056 b. tʂ-łob cimuma
 AOR:UP-come.out immediately.after
 1057 ‘As soon as it comes out / immediately after it has come out’

1058 Some finite clauses not followed by postpositions or relator nouns still have
 1059 clues of a subordinate status. In particular, periphrastic TAME constructions in-
 1060 volving an Imperfective verb (§21.2) and a copula (§21.2.2), when they occur in
 1061 chains, tend to elide the auxiliary in the non-final clauses (§25.1.3), resulting in
 1062 constructions like (47), where the first clause cyr tce tu-ryma ‘it is active during
 1063 the night’ is incomplete (lacking the auxiliary juu-ŋu), and the copula juu-ŋu has
 1064 scope over the two clauses preceding it (see also 10, §21.2.2, for a example of the
 1065 same type with more than ten clauses sharing a single auxiliary).

- 1066 (47) lulu nuu, [cyr tce tu-ryma], sŋi tce ku-nuu-rŋguu juu-ŋu
 cat DEM night LOC IPFV-work day LOC IPFV-AUTO-lie.down SENS-be
 1067 ‘The cat [is active during the during the night] and sleeps during the day’

1068 We also find a special type of serial verb construction expressing manner
 1069 (§25.4.1), in which the verb in the manner clause (with a similitative verb §25.4.1.2
 1070 or a deideophonic verb §25.4.1.1) shares the same TAME, subject (and often ob-
 1071 ject) as the verb in the other clause. In (48) for example, stu ‘do like’ and the
 1072 χtci ‘wash’ are in Aorist 1SG→3SG form (§21.5.1.1) and share a-ŋga ‘my clothes’ as
 1073 object (the demonstrative ki is semi-object, §14.4.2).

- 1074 (48) a-ŋga nuu ki tʂ-stu-t-a tce
 1SG.POSS-clothes DEM DEM.PROX AOR-do.like-PST:TR-1SG LNK
 1075 nuu-χtci-t-a
 AOR-wash-PST:TR-1SG
 1076 ‘I washed my clothes like this.’

1077 2.8 Remarkable features

1078 After this overview of the core features of Japhug grammar, this section presents
 1079 a selection of topics of particular interest to linguistic typology and comparative
 1080 grammar in Japhug.

1081 2.8.1 Consonant clusters

1082 The Kamnyu dialect of Japhug has over four hundred consonant clusters in onset
 1083 position (§4.2, Jacques 2019b), whose internal structure can be studied through
 1084 alternations in reduplication patterns (§4.1, Jacques 2007).

1085 In addition to the size of the inventory, which in itself is significant (Japhug is
 1086 one of the languages with the greatest number of clusters in the Trans-Himalayan
 1087 family; only Khroskyabs boasts more clusters, Lai 2017: 101), the system of clus-
 1088 ters presents two main points of interest.

1089 First, syllable onsets in Japhug are rich in clusters violating the *sonority se-*
 1090 *quencing principle* (ssp, §4.2.3.2, Blevins 1995: 210), and in particular present cases
 1091 of ssp-infringing clusters without corresponding ssp-compliant equivalents. For
 1092 instance, the ssp-infringing clusters /rm-/ and /rt-/ are relatively common, while
 1093 †/mr-/ and †/tr-/ are unattested (except across syllables, §4.2.3.1) due a series of
 1094 sound changes (§4.2.1.9, §4.2.2.4).

1095 Second, some of these clusters are of considerable antiquity, as they appear to
 1096 be preservations from proto-Trans-Himalayan (Jacques 2015c; Zhang et al. 2019),
 1097 and thus of considerable importance for the reconstruction of syllable structure
 1098 in this family in general (Hill 2019: 212) and in Old Chinese in particular (Gong
 1099 & Lai 2017).

1100 2.8.2 Direct-inverse

1101 Direct-inverse systems, while relatively well-attested in languages of the Ameri-
 1102 cas (Zúñiga 2006), are very rare in the Old World. Japhug and the other Gyalrong
 1103 languages (DeLancey 1981; Sun & Shidanluo 2002; Jacques 2010a; Gong 2014) are
 1104 in fact the only languages in Eurasia to have a near-canonical direct-inverse in-
 1105 dexation system (§14.3.2.8, Jacques & Antonov 2014), in particular with a direct-
 1106 inverse contrast in both mixed (§14.3.2.1) and non-local domains (§14.3.3).⁸

⁸Inverse-like phenomena are observed in Japanese (Koga & Ohori 2008), Circassian (Arkadiev 2017) and some Trans-Himalayan languages, especially Kuki-Chin and Northern Naga (Konnerth & DeLancey 2019), but the inverse morphemes in these languages are in the process of being grammaticalized, and still retain a *cislocative* meaning, whereas the inverse *wy-* in

Moreover, Japhug is unique among Gyalrong languages in lacking inverse marking in the local 2→1 configuration (§14.3.2.3, §14.8.3, Jacques 2018c), and possibly the only known language to use the inverse marker as the sole marker of *generic transitive subject* (§14.3.2.5).

2.8.3 Inflectionalization

While person indexation is one of the defining properties of verbs in Japhug (§2.4.2), a handful of expressions of nominal origin have acquired the ability to take dual *-ndzi* and plural *-nuu* indexation suffixes by analogy with imperative verb forms (§14.7).

For instance, the phatic expression *syrma* ‘good night’ (§14.7.1) has the dual *syrma-ndzi* ‘good night (to both of you)’ when addressing two people. This unusual phenomenon has parallels in Indo-European (Viti 2015: 113–114).

2.8.4 Prefixal chain

Japhug, like other Gyalrong languages, has a large prefixal template (§11.2), allowing more than seven or eight prefixes in a row (example 15, §2.4.1), while the suffixal chain is much more restricted (§11.3). It is among the rare strongly prefixal languages with strict verb-final order, alongside Ket (Werner 1997) and Athabaskan (Rice 2000).

While the verb-final word order is relatively ancient,⁹ there evidence that the part of the prefixal chains in Gyalrongic languages have been recently innovated, either through grammaticalization and integration of verb roots from serial-verb constructions (Jacques 2013b), or the absorption of adverbs or clause-final particles occurring immediately before the verb into the verbal word (§21.5.4, §21.7.1.3; see also Lai accepted on Khroskyabs).

Japhug also has a few bipartite verbs, made from two verb stems with identical TAME and person indexation cliticized to each other and with elision of either the suffixal chain of the first verb as in (49), the prefixal chain of the second verb, or both (§11.6.3, Jacques 2018a).

Japhug is dedicated to the expression of person indexation. Kiranti languages also have direct-inverse systems (in particular Bantawa and Puma, see Doornenbal 2009 and Bickel, Gaenzle, et al. 2007), but the distribution of inverse and direct markers in these languages is much less transparent than in Gyalrong (Jacques & Antonov 2014).

⁹Reconstructing word-order is a notoriously difficult task, but there is no positive reason to assume any other order at least for the common ancestor of Tibeto-Gyalrongic languages (Sagart et al. 2019).

- 1135 (49) *a-ty-tuu-stu=a-ty-tuu-mbat-nuu*
IRR-PFV-2-try.hard(1)=IRR-PFV-2-try.hard(2)-PL
1136 ‘Do your best/try hard.’

1137 2.8.5 Hybrid indirect speech

1138 Reported speech in Japhug frequently presents mismatches in person indexation,
1139 with the main verb representing the point of view of the subject of the
1140 complement-taking verb, and the nouns and possessive prefixes that of the cur-
1141 rent speaker.

1142 For instance, in (50a), the verb *rtoꝝ* has 1PL indexation, reflecting the point
1143 of view of the transitive subject of the complement-taking verb *tuu-nuu-suso-nuu*
1144 ‘you think, you want’ (the daughters-in-law, the addressee). On the other hand,
1145 the 2PL possessive prefixes on *nuu-pʰama* ‘your parents’ and the other nouns cor-
1146 respond to the point of view of the father-in-law (the current speaker) – a 1PL
1147 possessor would be expected in the reported speech clause if no shift of point of
1148 reference had taken place, as in (50b).

1149 Three different translations of the Japhug sentence are proposed in (50a), the
1150 first in direct speech, the second in indirect speech (with shift toward the current
1151 speaker) and the third as a merger of the two (agrammatical in English), directly
1152 reflecting the original *hybrid indirect speech* (§24.2.5.2).

- 1153 (50) a. *a-me ra nuuzora kumy, (...) [nuu-kʰa,*
1154 *1SG.POSS-daughter PL 2PL also 2PL.POSS-house*
*nuu-mu nuu-pʰama ra cuu-rtoꝝ-*i*]*
1155 *2PL.POSS-mother 2PL.POSS-parent PL TRAL-look:FACT-1SG*
tuu-nuu-suso-nuu cti tce jy-nuu-ce-nuu
2-AUTO-think:FACT-PL be.AFF:FACT LNK IMP-VERT-go-PL
- 1156 Direct: ‘My daughters in law_i, you_i think “Let us_i go and see our_i
1157 house, our_i parents,” so go home.’
- 1158 Indirect: ‘My daughters in law_i, you_i want to go (home) and see your_i
1159 house, your_i parents, so go home.’
- 1160 Hybrid indirect: ‘My daughters in law_i, you_i think, ‘Let us_i go and
1161 see your_i house, your_i parents, so go home.’ (2005 tAwakWcqraR, 6)
- 1162 b. *ji-kʰa, ji-mu ji-pʰama ra*
1163 *1PL.POSS-house 1PL.POSS-mother 1PL.POSS-parents PL*
*cuu-rtoꝝ-*i* (ra)*
TRAL-look:FACT-1PL be.needed:FACT
- 1164 ‘(Let us) go and see our houses, our mothers, our parents.’

Hybrid indirect speech is also found in Tibetic languages (Tournadre 2008), where it has contributed to confusion around the notion of “conjunct/disjunct” marking. The presence of person indexation makes this phenomenon more easily identifiable in Japhug than in Tibetan.

1169 2.8.6 The expression of degree and comparison

Japhug lacks comparative and superlative derivations, but has a rich array of constructions expressing degree and comparison (chapter 26), some of which are rather uncommon at least in this part of the world.

High degree can be marked by combining a finite adjectival stative verb with a degree adverb (§26.1.1) as in (51a) as in most languages. However, the most common construction conveying this meaning, illustrated in (51b), comprises a degree nominal (§26.1.2, §16.3) serving as intransitive subject of a verb of degree ‘be extremely’. Thus the neutral way in Japhug to say ‘X is very intelligent’ is literally ‘X’s degree of intelligence (of being intelligent) is extreme.’

- 1179 (51) a. *wuma zo juu-cqraab*
 really EMPH SENS-be.intelligent
 'S/he is very intelligent.'

1180
 b. *uu-tuu-cqraab* $\mu u \text{-} s \alpha \chi a b$
 3SG.POSS-NMLZ:DEG-be.intelligent SENS-be.extremely
 'S/he is extremely intelligent.'

1181
 1182

The main comparative construction in Japhug is unusual for a different reason. In many languages including Tibetic (Zhou 2003: 239, Heine & Kuteva 2002: 29), the ergative or the ablative are used to mark the standard of comparison. In Japhug, as illustrated in (52), the standard has a dedicated postposition (§8.2.7), whereas the ergative marker *kua* is used to mark the *comparee* instead (§8.2.2.7, §26.2.1).

- 1189 (52) [u-*bi* s_{vz}] [u-*pi* nu_v *kui*]
3SG.POSS-younger.sibling COMP 3SG.POSS-elder.sibling DEM ERG
1190 *mpcr*
be.beautiful:FACT
1191 ‘The elder (sister/brother) is more beautiful than the younger (sister/
1192 brother).’

¹¹⁹³ This observation is all the more surprising given that *kuu* is most likely borrowed from Tibetan (Jacques 2016b).

1195 2.8.7 Japhug morphology and Trans-Himalayan comparative 1196 linguistics

1197 The rich verbal and nominal morphology of Japhug and other Gyalrongic lan-
1198 guages comprises both archaisms and innovative features illustrating interesting
1199 grammaticalization pathways.

1200 Among innovations, many voice prefixes (§11.2.2) have been created through
1201 reanalysis of denominal derivation (§20.10). The clearest case of an innovating
1202 voice marker is the antipassive *r-* (§18.6.1): irregular forms provide direct evi-
1203 dence that it originated from the intransitive denominal *r-* (§20.4.1) applied to de-
1204 verbal nouns (§20.10.1.1, Jacques 2014b). Other representative innovations include
1205 the reflexive *zy-* from an incorporated pronoun (§18.3.7, Jacques 2010b), the as-
1206 sociated motion prefixes grammaticalized from motion verbs (§15.2.1, Jacques
1207 2013b), the orientation preverbs from locational adverbs or nouns (§15.1.1.4) and
1208 the comitative adverbs (§5.8.1, Jacques 2017d).

1209 In addition to innovative affixes, Japhug also preserves morphological archa-
1210 isms which go further back than proto-Gyalrongic, some potentially even up to
1211 proto-Trans-Himalayan.

1212 The antiquity of person indexation in Gyalrongic (§14.8.1) and the rest of Trans-
1213 Himalayan is a notoriously controversial topic (Bauman 1975; DeLancey 1989;
1214 LaPolla 1992; van Driem 1993b) but in any case a paradigm comprising a second
1215 person prefix with suffixes for first person and number of third and second per-
1216 son should at least be reconstructed back to the common ancestor of Gyalrongic,
1217 Kiranti and probably Jinghpao (Jacques 2012a; DeLancey 2014; Jacques 2016e).

1218 In a few cases, archaic morphology only remains as lexicalized traces in Japhug,
1219 in particular the applicative *-t* suffix, very prominent in Kiranti (Michailovsky
1220 1985; Jacques 2015a) for instance, which is only attested in two verbs (§19.7.2), or
1221 the nominalization *-z* (§16.5.1) suffix, which has cognates in Tibetan and Chinese
1222 (Jacques 2003; 2016c).

1223 In other cases, derivational processes that only exist as traces in most of the
1224 family are still productive in Japhug and other core Gyalrong languages, in parti-
1225 cular the sigmatic denominal and causative prefixes (§20.3, §17.2, Sagart & Baxter
1226 2012; Jacques 2015d), velar (§16.8.1) and sigmatic (§16.8.2) nominalization prefixes
1227 (Jacques 2014d; Konnerth 2016; Jacques 2018b), and the dental indefinite posses-
1228 sor prefix of inalienably possessed nouns (§5.1.3, §5.1.2).

1229 Gyalrong data is particularly relevant to the debate regarding the voicing al-
1230 ternation in Old Chinese and other Trans-Himalayan languages (Handel 2012).
1231 Old Chinese and many other languages have pair of verbs with a voicing con-
1232 trast correlated with transitivity, in which the unvoiced verb is transitive and

the voiced one intransitive. It is not obvious which one is the derived form, and the direction of derivation is still being debated (Sagart & Baxter 2012; Mei 2012).

Japhug and other Northern Gyalrong languages (Jacques 2004: 411–412, Gong 2018: 271) however provide a crucial piece of evidence showing that the directionality was from the transitive verb to the intransitive one (§18.5.1.2), confirming evidence from unrelated sources (Sagart 2003): the Tibetan borrowing *χtvr* ‘scatter’ (from གྲତ୍ གୋ ‘scatter’) has an intransitive counterpart *ɛndvr* ‘be scattered’ (§18.5.1) with prenasalized onset without equivalent in Tibetan. This intransitivizing derivation can be described as anticausative (§18.5.2). There is further evidence that the prenasalization alternation comes from a nasal prefix, very probably a lexicalization of the autive *nu-* prefix (§19.1.7), whose spontaneous function (§19.1.4) is very close to that of anticausative verbs. Evidence for autive derivation only exists in Gyalrongic (Lai 2017: 357–368, Gong 2018). However, the presence of traces of the anticausative derivation as voicing alternations in various branches of Trans-Himalayan, for instance in Kiranti (Jacques 2015a), Old Chinese (Sagart & Baxter 2012) or Tibetan (Jacques 2012b), implies that the autive derivation by extension must also be of proto-Trans-Himalayan age, and thus represents a unique archaism of Gyalrongic.

The richness and high productivity of morphology in Japhug and other Gyalrong languages, comparable with that of Sanskrit in Indo-European or Meskwaki in Algonquian, offer a framework to explore the fossil morphology of other Trans-Himalayan languages, in particular those belonging to the Burmo-Gyalrongic and Tibeto-Gyalrongic branches (Jacques & Michaud 2011; Sagart et al. 2019), but also potentially for the family as a whole.

Commenting on the irregularity of correspondences between Tibetan, Old Chinese and Burmese, Hill (2019: 212) concludes that “the phonetic influence of defunct morphology will one day explain these complicated correspondences, but this possibility will manifest only when more languages, particularly archaic languages such as those of the Rgyalrong and Kiranti branches, are brought within purview.” One of the aim of this grammar is precisely to provide comparativists with sufficient data on this language to make it systematically usable in Trans-Himalayan etymological research, in the hope that this field can one day reach the degree of sophistication of Indo-European (Fellner & Hill 2019).

¹²⁶⁶ 3 Phonology

¹²⁶⁷ 3.1 Introduction

¹²⁶⁸ Japhug syllables follow the template (C)(C)(C)V(C) with initial clusters containing
¹²⁶⁹ at most three consonants, and at most one consonant in the coda. Given
¹²⁷⁰ the complexity of possible onsets, it is not practical to provide an exhaustive
¹²⁷¹ list of possible syllables in the language (unlike Naish languages for instance,
¹²⁷² see Michailovsky & Michaud 2006); onsets and rhymes can however be listed
¹²⁷³ exhaustively.

¹²⁷⁴ This chapter, partly based on previous publications (in particular Jacques 2004
¹²⁷⁵ and Jacques 2019b), presents the inventory of consonants and vowels, offers a
¹²⁷⁶ focused discussion on syllabic structure and quasi-neutralization, and describes
¹²⁷⁷ suprasegmental phenomena and speech errors. The complete inventory of con-
¹²⁷⁸ sonant clusters is listed and analyzed in §4.2 in the following chapter.

¹²⁷⁹ This chapter does not treat the phonology of loanwords from Chinese (except
¹²⁸⁰ highly nativized ones). Non-nativized Chinese loanwords are represented in this
¹²⁸¹ grammar in pinyin (even though this system is an imperfect way of rendering
¹²⁸² Sichuanese Mandarin) between angled brackets.

¹²⁸³ 3.2 Consonants

¹²⁸⁴ 3.2.1 Onsets

¹²⁸⁵ There are fifty consonantal phonemes in Japhug (Table 3.1). All can occur as
¹²⁸⁶ simple onsets. Stops and affricates have a four-way contrast between voiceless
¹²⁸⁷ unaspirated, voiceless aspirated, voiced and prenasalized series.

¹²⁸⁸ The voiced fricatives /ɣ/ and /β/ should be classified as non-nasal sonorants
¹²⁸⁹ (§4.2.2), alongside the glides /j/ and /w/, the lateral /l/ and the rhotic /r/.

¹²⁹⁰ Table 3.2 provides examples of each of these phonemes, followed whenever
¹²⁹¹ possible by the vowel /u/. Among these consonants, four are only attested in
¹²⁹² borrowings from Tibetan and/or ideophones: /ʂ/, /dz/, /dʐ/ and /g/.

¹²⁹³ The phoneme /w/ is realized as a fricative [f] or [ɸ] before voiceless obstruents
¹²⁹⁴ and as [v] or [β] before voiced ones, and can also be fricativized when it occurs as

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Table 3.1: Consonantal phonemes

		Bilabial	Dental/ Alveolar	Retroflex	Alveolo- palatal	Palatal	Velar	Uvular	Glottal
Plosive	unv.	/p/	/t/			/c/	/k/	/q/	
	asp.	/p ^h /	/t ^h /			/c ^h /	/k ^h /	/q ^h /	
	voi.	/b/	/d/			/ɟ/	/g/		
	pren.	/mb/	/nd/			/ɲ/	/ŋ/	/ŋg/	/NG/
Affricate	unv.		/ts/	/tʂ/	/tç/				
	asp.		/ts ^h /	/tʂ ^h /	/tç ^h /				
	voi.		/dz/	/dʐ/	/dç/				
	pren.		/ndz/	/ndʐ/	/ndç/				
Nasal		/m/	/n/				/ɲ/		
Fricative	unv.		/s/	/ʂ/	/ç/		/x/	/χ/	
	voi.		/z/		/ʐ/		/ɣ/	/β/	/h/
Approximant		/w/					/j/		
Rhotic				/r/					
Lateral	voi.		/l/						
	unv.		/ɿ/						

1295 coda. In the orthography used in this work, it is transcribed as *<f>* when followed
 1296 by an voiceless stop, affricate or fricative, and as *<þ>* when followed by a voiced
 1297 one (§4.2.1.1), or in coda position (§3.2.2).

1298 As in many languages of the Tibetan area, the /r/ is a trilled retroflex voiced
 1299 fricative [ʈʂ] in onset position, sometimes realized as a simple voiced fricative [ʐ]. It is
 1300 devoiced to [ʂ] (with neutralization of the contrast with /ʂ/) when followed
 1301 by a voiceless consonant in clusters (§4.2.1.4).

1302 The prenasalized voiced stops and affricates /mb/, /nd/, /ndz/, /ndʐ/, /ndç/,
 1303 /ɲ/, /ŋg/ and /NG/ all have voiceless and voiceless aspirated counterparts such as
 1304 /mp(^h)/, /nt(^h)/, /nts(^h)/, /ntʂ(^h)/, /ntç(^h)/, /ŋk(^h)/ and /ŋq(^h)/ (§4.2.1.9). Yet,
 1305 there are several pieces of evidence showing that the prenasalized voiced
 1306 stops and affricates are of a different nature from the prenasalized voiceless ones.

1307 First, the former can appear in clusters preceded by fricatives or non-nasal
 1308 sonorants, as in /zembr/, /jndz/ or /rngl/, while the latter cannot. Clusters such
 1309 as * /zmp(^h)r/ , * /jntʂ(^h)/ or * /rnq(^h)l/ are not permitted in Japhug. Clusters of
 1310 this type may have existed, but have been removed by voicing the stop/affricate
 1311 (§18.5.7).

1312 Second, the uvular voiced prenasalized /NG/ has no simple voiced counterpart
 1313 * /g/, a fact which therefore precludes analyzing /NG/ as a cluster /n + g/.

1314 There is a three-way contrast between /tç/, /c/ and /k/ before the front vowel
 1315 /i/, as shown by the triplet comprising the correlative additive focus marker *tci*

Table 3.2: Examples of the consonant phonemes

/p/	/w-p <u>w</u> /	'its young'	/t <u>ç</u> /	/w-t <u>çew</u> /	'his boy'
/p ^h /	/w-p ^h <u>w</u> /	'its price'	/t <u>ç</u> ^h /	/tot <u>ç</u> ^h <u>w</u> /	'it gore him/her'
/b/	/bab <u>w</u> /	'blackcurrant'	/d <u>z</u> /	/d <u>zw</u> /	'it is oily'
/mb/	/mb <u>wut</u> /	'collapse'	/nd <u>z</u> /	/kond <u>zw</u> /	's/he accused him/her'
/m/	/tw <u>mw</u> /	'sky'	/c/	/e <u>w</u> /	'who'
/w/	/w <u>uwuw</u> /	'Boletus sp.'	/z/	/m <u>yzw</u> /	'not only'
/t/	/tu <u>bɔz</u> /	'one group'	/c ^h /	/c <u>w</u> /	'stone'
/t ^h /	/t ^h <u>w</u> /	'be serious'		/t <u>ryc</u> ^h <u>w</u> /	'wedge'
		(of a disease)			
/d/	/du <u>dwut</u> /	'turtledove'	/j/	/waj <u>w</u> /	'earthquake'
/nd/	/nd <u>w</u> /	'appear (rainbow)'	/ŋj/	/ŋju <u>w</u> /	'open (it)'
/ts/	/kon <u>ytsw</u> /	's/he hid it'	/p/	/p <u>urγnw</u> /	'soft and powdery'
/ts ^h /	/ts ^h <u>wt^ho</u> /	'kid'	/j/	/w-j <u>w</u> /	'its handle'
/dz/	/dzu <u>rdzw</u> /	'straight'	/k/	/ku <u>ki</u> /	'this'
/ndz/	/nd <u>zwupe</u> /	'way of sitting'	/k ^h /	/k ^h <u>wna</u> /	'dog'
/n/	/nu <u>ŋja</u> /	'cow'	/g/	/g <u>wgury</u> /	'very dark (sky)'
/s/	/su <u>mat</u> /	'fruit'	/ŋg/	/w-ŋ <u>gw</u> /	'inside'
/z/	/zu <u>mi</u> /	'almost'	/ŋj/	/e <u>ŋjw</u> /	'heat (deer)'
/l/	/ru <u>lwi</u> /	'medicine'	/x/	/x <u>urxur</u> /	'round'
/ɿ/	/fu <u>γnɿtɿw</u> /	'breathing movement'	/ɣ/	/ɣ <u>w</u> /	'genitive'
/tʂ/	/tʂ <u>umpa</u> /	'apron'	/q/	/qu <u>qli</u> /	'staring'
/tʂ ^h /	/tʂ ^h <u>wy</u> /	'maybe'	/q ^h /	/kw-s <u>ʂq^hwq^ha</u> /	'naughty'
/dz/	/dzu <u>ydzw</u> /	'strong (of tea)'	/NG/	/mu <u>ngw</u> /	'Ligularia fischeria'
/ndz/	/nd <u>zunbu</u> /	'guest'	/χ/	/χ <u>wχw</u> /	'having big nostrils'
/ʂ/	/ʂu <u>ŋʂwŋj</u> /	'clear'	/B/	/na <u>ŋzw</u> /	'shirt'
/r/	/ru/u/	'temporary place'	/h/	/han <u>uni</u> /	'a little'
		(nomads)			

¹³¹⁶ 'also' (§9.1.6.2), the highly polyfunctional *ci* 'one' (§6.6.1, §6.8, §6.7.2, §9.1.7, §7.1.1, §9.1.4.1 and §22.2.1) and the demonstrative *ki* 'this' (§6.9).

¹³¹⁸ The palatal stops /c/, /c^h/, /j/ and /ŋj/ cannot be analyzed as velar+/j/ clusters,
¹³¹⁹ as a clear contrast exists between the palatal series and velar stops followed by
¹³²⁰ /j/ (§4.2.2.2), in minimal pairs such as *njo* 'have damages' and *ŋgio* 'slip', 'glide'.¹
¹³²¹ That the onsets /ŋj-/ and /ŋgj-/ have a different syllabic structure is confirmed
¹³²² by their reduplication patterns (§4.1): while in the former the palatalization is
¹³²³ present on the reduplicant *pui-nv-ŋjw~ŋjw* 'have damages everywhere' (in the
¹³²⁴ distributed action derivation, §19.4), in the latter the /j/ is not reduplicated as
¹³²⁵ *pui-nv-ŋgw~ŋgio* 'he slipped everywhere'.

¹³²⁶ The alveolo-palatal affricates /tç/, /tç^h/, /dz/ and /ndz/ are also contrastive
¹³²⁷ with dental affricates+j clusters, as shown by the minimal pair *ndziaw* 'be tight'

¹The grapheme <*i*> represents an allophone of /j/ in medial position with dental and dorsal initials (§4.2.2.2).

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1328 (of knot) vs. *ndzak* ‘swim’ (§4.2.2.2). There is also a contrast with dental stops+j,
1329 though no good minimal pairs can be found due to the rarity of these clusters.

1330 The attested contrasts between coronal affricates and dorsal stops with and
1331 without the *j* medial are illustrated in Table 3.3 in combination with the vowel
1332 /o/.

Table 3.3: Palatalization contrasts in coronal and dorsal onsets

Onset	Example
/ts/	<i>tr̥tsɔk</i> ‘Potentilla anserina’
/tsj/	<i>tr̥-mtsiok</i> ‘beak’
/tʂ/	<i>tʂɔk</i> ‘add water’
/tç/	<i>mtçɔk</i> ‘be sharp’
/c/	<i>co</i> ‘valley’
/k/	<i>ko</i> ‘prevail over’
/kj/	<i>kio</i> ‘cause to glide’
/q/	<i>rqɔk</i> ‘hug’
/qj/	<i>qiok</i> ‘vomits’

1333 The voiceless lateral /ɬ/ (realized by some speakers as a postaspirated lateral
1334 [ɬ^h]), is a marginal phoneme in Japhug, which does not appear in clusters (except
1335 heterosyllabic ones, as in /cuyɬaj/ ‘symptom in which the oral cavity becomes
1336 white’) and is very rare in the native vocabulary. Yet, its phonemic status is justi-
1337 fied by the fact that it contrasts with /lx/; there are no minimal pairs contrasting
1338 the two, but the contrast can be indirectly illustrated by examples such as *alxaj*
1339 ‘not properly put’ (of clothes) and *lxulxi* ‘thick and cumbersome’ on the one hand,
1340 and *ɬrt* ‘become old’ and *ɬyndzi* ‘ghost’ on the other hand.

3.2.2 Codas

1342 The inventory of consonants in coda position in Japhug is more restricted than in
1343 initial position. In particular, the voicing and aspiration contrasts are neutralized
1344 in codas.

1345 Only twelve consonants out of fifty appear as codas: /-p/, /-w/, /-m/, /-t/, /-z/,
1346 /-n/, /-l/, /-r/, /-j/, /-y/, /-ŋ/, /-ɳ/. The stop /-p/ is restricted to a few ideophones
1347 (§10.1.5.2), and is not found in the inherited non-ideophonic vocabulary and in
1348 Tibetan loanwords, except as first element of the heterosyllabic cluster /pt/ in the

1349 word /sqap.tury/ ‘eleven’ (§4.2.3.1). The codas /-n/, /-l/ and /-ŋ/ are extremely
 1350 rare (but not entirely absent) in the non-ideophonic native vocabulary.

1351 A list of possible combinations between codas and vowels in Japhug is de-
 1352 scribed in §3.3.2.

1353 In word-final position, codas are voiced when followed by a word beginning
 1354 with a voiced consonant or a vowel, but are devoiced in phrase-final position,
 1355 before a pause or before a voiceless segment (even across word boundaries, §4.3).
 1356 In isolation, word-final /-z/, /-r/, /-j/, /-ɣ/ and /-ʂ/ in particular are realized as [s],
 1357 [ɾ], [j], [x] and [χ], respectively. The coda /-ʂ/ can also be realized alternatively
 1358 as pharyngealization of the preceding vowel.

1359 Since the voicing contrast between the voiceless fricatives /s/, /x/, /χ/ and
 1360 the voiced ones /z/, /ɣ/, /ʂ/ is neutralized in coda position, it could seem bet-
 1361 ter to argue that the fricative codas, whatever their phonetic realization, are
 1362 archiphonemes {s,z}, {x,ɣ} and {χ,ʂ}, and that any discussion of their underlying
 1363 voicing is futile (Hill 2016). However, in the case of Japhug at least, some mor-
 1364 phonological rules are easier to describe if one assumes that fricative codas
 1365 are underlyingly voiced.²

1366 First, when the 1SG -a suffix is added to a verb stem ending in a fricative coda,
 1367 that coda is resyllabified, becoming the onset of the syllable with a as rhyme.
 1368 In these cases, the voiced allophone always surfaces (§14.2.1.1): for instance the
 1369 1SG→3SG Imperfective of *ntʂʰoz* ‘use’ is *tu-ntʂʰóz-a*, syllabified as /tu.ntʂʰo.za/. If
 1370 one were to assume that the fricative coda -z were voiceless or underspecified for
 1371 voicing, a context-specific voicing rule would have to be assumed to have taken
 1372 place, since ũsa is a permissible sequence in Japhug, as in *pjʂ-wy-sat* IFR-INV-kill
 1373 (see for instance example 36 in §20.4.2). It is more economical to assume that -z
 1374 and the other fricative codas are underlyingly voiced, and become devoiced in the
 1375 same contexts as the sonorants.

1376 Second, the locative postposition *zuu* (§8.2.4.1) is the result of the degrammati-
 1377 calization of the locative *-s suffix still attested in Situ (§8.2.1). The fact that it has
 1378 a voiced, rather than an voiceless onset, suggests that the fricative was voiced
 1379 when it was a suffix.

²I owe the idea that final -z is voiced to Sun (2005), where a similar analysis is implicitly proposed about Tshobdun.

1380 3.3 Vowels and rhymes

1381 3.3.1 Vowels

1382 3.3.1.1 Vowel phonemes

1383 Japhug has eight vowel phonemes, listed in Table 3.4. The mid-open unrounded
 1384 vowels /ɤ/ and /e/ are only marginally contrastive: /ɤ/ does not occur in word-
 1385 final open syllables except in unaccented clitics (like the additive *nɤ*, §8.2.6), and
 1386 /e/ only occurs in the last (accented) syllable of a word. They are clearly con-
 1387 trastive only with the coda /-t/ (§3.3.2).

Table 3.4: List of vowels in Japhug

Vowel	Example	Meaning
/a/	/qala/	'rabbit'
/e/	/qale/	'wind'
/i/	/juli/	'flute'
/ɤ/	/lɤpury/	'radish'
/ɯ/	/ruɯɯ/	'medicine'
/y/	/qaɟy/	'fish'
/o/	/lo/	UPSTREAM
/u/	/tʂlu/	'milk'

1388 Not all speakers of Kamnyu Japhug have a phoneme /y/ in the native vocabu-
 1389 lary. Even for those speakers, it is only attested in the word 'fish' and the verbs
 1390 derived from it. It nevertheless contrasts with /ɯ/ and /u/, as shown by the
 1391 quasi-minimal pairs /qaɟy/ 'fish', /wajɯ/ 'earthquake' and /juli/ 'flute'. Other
 1392 speakers pronounce 'fish' with a medial /w/ as /qaɟwi/. However, [y] is found in
 1393 the speech of all Japhug speakers in Chinese loanwords such as 洋芋 <yángyù>
 1394 'potato'.

1395 3.3.1.2 Vowel assimilation

1396 When followed by a syllable containing a rounded vowel (/u/ or /o/), the back
 1397 unrounded vowels /ɯ/ and /ɤ/ optionally undergo rounding harmony to [u]
 1398 and [o], respectively. For instance, /ɣɤzu/ 'exist (sensory)' (§22.5.1.2) is generally
 1399 pronounced as [yozu], and the reduplicated form *tu~tu-dyn* 'more and more'
 1400 (§12.4.1.4) is realized as [tutudən].

1401 The phoneme /ɤ/ in prefixes tends to be pronounced more open as [e] when
 1402 followed by a syllable whose main vowel is /a/, making it sometimes difficult
 1403 to perceive the contrast, for instance between *ta-ma* ‘work’ and *tr̥-ma* ‘mother’
 1404 (honorific). In the verbal system, the 1SG -a suffix triggers obligatory regressive
 1405 assimilation ɤ → a on the preceding syllable (see Table 14.2, §14.2.1.1).

1406 3.3.1.3 Synizesis

1407 While no true diphthongs exist in Japhug, when the 1SG -a suffix is added to a verb
 1408 stem ending in an open syllable, the two syllables undergo synizesis (§14.2.1.1).
 1409 When the verb stem contains the mid vowels /-e/ and /-o/, they become the cor-
 1410 responding high vowels /-i/ and /-u/ due to merging with a, and the contrasts
 1411 between /e/ and /i/ on the one hand, and o and u on the other hand, are neutral-
 1412 ized. For instance, *tso-a* [tsua] ‘I understand’ and *βze-a* [βzia] ‘I (will) do it’ are
 1413 homophonous with *tsu-a* ‘I have time’ and *βzi-a* ‘I (will) be drunk’, respectively.
 1414 Three pseudo-diphthongs are thus attested: *ia* (from *e-a* and *i-a*), *ua* (from *o-a* and
 1415 *u-a*) and *wa* (from *w-a*).

1416 Synizesis results in syllables homophonous to the rhymes -wa and -ja in clus-
 1417 ters ending in -w- (§4.2.2.1) or -j- (§4.2.2.2) followed by the vowel -a. For instance,
 1418 *aro-a* ‘I own’ (§14.2.3) is homophonous with *a-rwa* ‘my tent’ (§4.2.2.1).

1419 Apart from synizesis, two other types of vowel contraction are found in Japhug.
 1420 First, verb stems with initial *a-* have specific conjugation patterns, where initial
 1421 *a-* merges with the immediately preceding prefix following rules that are not
 1422 completely trivial (§12.3). Second, the 1SG -a suffix merges with -a stems as *a*,
 1423 without vowel lengthening in Kamnyu Japhug (§14.2.1.1).³

1424 3.3.1.4 Zero onset

1425 There are strong phonotactic restrictions on vowel-initial stems and words in
 1426 Japhug.

1427 In word-initial position, only *a-* and *u-* are found. These vowels can merge
 1428 with previous open syllables (§4.3), and no glottal stop appears, unlike in many
 1429 Trans-Himalayan languages such as Khaling (Jacques et al. 2012). Phonetic [u-],
 1430 [o-], [i-] do appear in word-initial position, but are preferably analyzed as /wu-/,
 1431 /wo-/ and /ji-/ with a glide.

1432 The only possible stem-initial vowel in verbal stems is *a-* (§12.3). It is relatively
 1433 common due to the fact that it appears in many derivational prefixes (§20.2, §18.1,

³However, vowel lengthening is found in some dialects, such as that of Sarndzu.

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§18.4, §18.7). Stem-initial *a*- undergoes vowel contraction with all preceding prefixes. By contrast, stem-initial *wu*- or *ji*- (for instance, *wum* ‘gather’ and *ji* ‘plant’) never merge with preceding prefixes.

In noun stems, initial *a*- also exists and interacts with prefixes (§5.1.1), but is considerably rarer.

Comparison with other Gyalrongic languages indicates that word-initial *a*- and *wu*- (in the native vocabulary, excluding loanwords and interjections) are secondary. Word-initial *wu*- is only attested in a few interjections (such as *wutɕʰwutɕʰu*, §10.2.1) and in the third possessive prefix (§5.1.1). The form *tyu*- (homophonous with the inverse prefix, §14.3.2.7) would be expected, and the unexpected form *wu*- in Japhug might be due to false segmentation in sandhi (§5.1.1.5). Word-initial *a*- originates mainly from **ŋa*- (Jacques & Chen 2007), due to loss of the simple initial **ŋ*- in non-stressed syllables (including *wuma* ‘really’ from *yo.ma* ‘real, true’, but excluding monosyllabic verb stems such as *yu* ‘be’ and *ŋa* ‘buy on credit, owe’).

3.3.2 Rhymes

There are strong phonotactic constraints on possible rhymes in Japhug. Table 3.5 lists all attested rhymes; the coda /-w/ is transcribed as -β in the orthography used in this grammar.

Table 3.5: List of possible rhymes in Japhug

/w/	/p/	/m/	/t/	/n/	/z/	/l/	/r/	/j/	/y/	/ŋ/	/β/
/a/	/aw/	/ap/	/am/	/at/	/an/	/az/	/al/	/ar/	/aj/	/aq/	/au/
/e/					/et/						
/i/					/it/			/il/			
/ɿ/	/ɿw/		/ɿm/	/ɿt/	/ɿt/	/ɿz/	/ɿl/	/ɿr/	/ɿj/	/ɿy/	
/u/	/uw/	/up/	/um/	/ut/	/un/	/uz/	/ul/	/ur/	/ur/	/uy/	/uŋ/
/y/					/yt/						
/o/				/om/	/ot/	/on/	/oz/	/ol/	/or/	/oj/	/oŋ/
/u/					/ut/		/uz/			/uj/	/oβ/

The only coda attested with all vowels is /-t/ (Table 3.6). Among these rhymes, /-et/ and /-yt/ are only attested in verb forms with the past transitive *-t* suffix (§11.3, §21.1.3, §14.3.2.1), which occurs in word-final position only in 2sg→3 forms.

In closed syllables with an alveolo-palatal or a palatal consonant preceding the vowel, /uŋ/ is fronted and its contrast with /i/ is neutralized (§3.5.2.1). It is

Table 3.6: Examples of closed syllable rhymes in /-t/

Vowel	Rhyme	Example	Meaning/Gloss
/a/	/at/	/tʂtuwʂylat/ tʂ-tuu-su-wla-t	'you boiled it' AOR-2-CAUS-boil-PST:TR
/e/	/et/	/tʂtuwŋyŋylet/ tʂ-tuu-nŋyŋle-t	'you did it' AOR-2-do-PST:TR
/i/	/it/	/tʂtuwʂyli/ tʂ-tuu-wyli-t	'you reimbursed it' AOR-2-reimburse-PST:TR
/ɿ/	/ɿt/	/jʂtuwɿɿt/ tʂ-tuu-ɿɿt	'you threw it' AOR-2-release
/ɯ/	/ɯt/	/tʰuʂtuwplut/ tʰu-tuu-wplut	'you destroyed it' AOR-2-destroy
/y/	/yt/	/lotuʂnuqajt/ lo-tuu-z-nu-qajy-t	'you let him fish' IFR-2-DENOM-fish-PST:TR
/o/	/ot/	/nuʂtuwʂylot/ nu-tuu-syβlo-t	'you took care of him' AOR-2-take.care-PST:TR
/u/	/ut/	/puʂtuwʂylut/ pu-tuu-nʂ-lu-t	'you milked it' AOR-2-DENOM-milk-PST:TR

1458 only maintained before /-t/ in forms with the past transitive -t suffix. For in-
 1459 stance, we find the minimal pair /tʂ-tuu-cuʂ-t/ 'you opened it' (AOR-2-open-PST)
 1460 and /tʂ-tuu-cit/ 'you moved' (AOR-2-move).

1461 With the coda /-j/, the contrasts between /u/ and /i/ on the one hand, and
 1462 /ɿ/ and /e/ on the other hand, are neutralized. The rhyme /-aj/ is realized as [ɛj]
 1463 or [æj].

1464 3.3.3 Historical phonology

1465 Some notions of Japhug historical phonology are useful to account for the gaps in
 1466 the distribution of rhymes (§3.3.2) as well as some vowel alternations (§12.2.2.1).

1467 Comparison of inherited vocabulary between Japhug and extra-Rgyalrongic
 1468 languages shows that the codas *-l, *-n and *-ɳ have been lost in the native vo-

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¹⁴⁶⁹ cabulary (Table 3.7). Words with these codas are either borrowed from Tibetan
¹⁴⁷⁰ or have an ideophonic origin.

Table 3.7: Loss of *-l, *-n and *-ŋ in Japhug

Japhug	Other languages
<i>qačpa</i> ‘frog’	ཇ་པ་ <i>sbal.pa</i> ‘frog’
<i>tvjpa</i> ‘snow’	Dulong <i>tuw</i> ³¹ <i>wān</i> ⁵³ ‘snow’ (Sun 1982)
<i>turmui</i> ‘dusk’	སྔର୍ମ྘ ମୁନପା ‘darkness’
<i>tui-mts'i</i> ‘liver’	କିଚିତ୍ତିନ୍ ମିତ୍ତିନ୍ପା ‘liver’
<i>pyo</i> ‘spin’	ଧୟଦିଙ୍ ପାଯିମା ‘spindle’
<i>mto</i> ‘see’	ଜ୍ଞାନ ମତ୍ତୋଜ ‘see’
<i>zri</i> ‘be long’	ରିଙ୍ଗ ରିଙ୍ଗପୋ ‘long’
<i>tr-rmi</i> ‘name’	ମିନ୍ ମିନ୍ ‘name’

¹⁴⁷¹ The proto-Gyalrong rhyme *-aj corresponds to Japhug -o (Situ -o, Tshobdun -i,
¹⁴⁷² Zbu -æ, Jacques 2004: 228–231); this correspondence is also found in some early
¹⁴⁷³ loanwords. A secondary -aj rhyme has been created from several sources (§3.5.1),
¹⁴⁷⁴ most importantly Tibetan borrowings postdating the sound change *-aj → -o.

¹⁴⁷⁵ A chain shift has taken place, as Proto-Gyalrong *-o has regularly changed to
¹⁴⁷⁶ -u and *-u to -u (Jacques 2004: 239).

¹⁴⁷⁷ In closed syllables, rounded vowels have become unrounded in the native vo-
¹⁴⁷⁸ cabulary. In the earliest layer of Tibetan loanwords, -od, -or, -ob, -ol and -os cor-
¹⁴⁷⁹ respond to -yt, -yr, -yβ, -yl and -yz, respectively, but are unchanged in the later
¹⁴⁸⁰ layers (Table 3.8).

¹⁴⁸¹ This sound change did not affect rhymes with uvular codas: proto-Gyalrong
¹⁴⁸² *-oq remained -oq.

¹⁴⁸³ The rhymes *-aj, *-oj and *-uj on the other hand have merged as -e, -e and -i,
¹⁴⁸⁴ respectively. These vowel fusions occurred before *-o → -u, as shown by the -u / -e
¹⁴⁸⁵ alternation in Stem III (§12.2.2.1, Jacques 2004: 357, Jacques 2008a: 234), which is
¹⁴⁸⁶ cognate to the ‘transitivity marker’ -jə in Tshobdun (Sun 2003: 496), as illustrated
¹⁴⁸⁷ in Table 3.9.

¹⁴⁸⁸ After this sound change had removed all -j codas, secondary -oj and -uj rhymes
¹⁴⁸⁹ were later analogically created by addition of the locative *-j suffix to stems in
¹⁴⁹⁰ -o and -u; a handful of examples remain in Japhug (§8.2.4.4). The origin of the
¹⁴⁹¹ rhyme -aj in Japhug is an unsolved problem, and may be due to contextual vowel
¹⁴⁹² breaking (Gong Xun, p.c.).

Table 3.8: Unrounding of vowels in Tibetan loanwords

Japhug	Tibetan
<i>mtçʰytkʰo</i> ‘house shrine’	ཇྰ୍କྲ୍ୟାନ୍ ମ୍ତ୍ଚେୱୁଦ୍ କ୍ହୋ ଶ୍ରିନୀ, ଚାପେ
<i>pjyl</i> ‘go around, cross, avoid’	ସ୍ତ୍ର୍ଯା ବୋଲ୍ ତରୁ ଆବିଦ୍
<i>χtyr</i> ‘scatter’	ସର୍ତ୍ସ୍ ଗ୍ତୋ ତରୁ ଆବିଦ୍
<i>slvβkʰaj</i> ‘school’	ସ୍ଲୋବ୍ କ୍ହୋଜ୍ ଶ୍କୁଲ୍
<i>tukryz</i> ‘discussion’	ସ୍ଲୋବ୍ ଗ୍ରୋସ୍ ଡିସ୍କୁର୍ସନ୍
<i>yot</i> ‘warm light’	ସ୍ଲୋବ୍ ଫୋଟ୍ ଲିଟ୍
<i>kʰanjkot</i> ‘architect’	ଏଣ୍ଟେର୍ଜ୍ କ୍ହୋଜ୍ ବ୍କୋଡ୍ ଫୌନ୍ଡିଂ ଏହୁସ୍
<i>nor</i> ‘make a mistake’	ସର୍ତ୍ସ୍ ନୋର୍ ମାକ୍ ମିଷ୍ଟକେ
<i>spoz</i> ‘incense’	ସ୍ଲୋବ୍ ସ୍ପୋସ୍ ଇନ୍ସେନ୍ସ୍

Table 3.9: Sound changes and stem III alternation in Japhug

Stem I	Proto-form	Stem III	Proto-form	meaning
<i>ndza</i>	*ndza	<i>ndze</i>	*ndza-j	‘eat’
<i>rku</i>	*rko	<i>rke</i>	*rko-j	‘put in’
<i>βluu</i>	*plu	<i>βli</i>	*plu-j	‘burn’

¹⁴⁹³ The only other closed rhymes with *o* in the native vocabulary are *-oz*, which
¹⁴⁹⁴ originates from *-aŋs, as in *soz* ‘morning’, and *-ot* (in the case of verb stems in *-o*
¹⁴⁹⁵ with the past transitive *-t* suffix, §11.3).

3.4 Syllabic constraints

3.4.1 Rhotic dissimilation

¹⁴⁹⁶ The rhotic coda *-r* cannot co-occur with a rhotic or a retroflex consonant in the onset: syllables of the type †*CrVr*, †*rCVr* or †*ʈʂVr* are not attested. However, a *-r* preinitial can be preceded by a syllable containing a /r/ or a retroflex fricative or affricate in its onset, in reduplicated forms such as *rdardul* ‘dust, dirt’ (§5.7.8.2), or a compound like *qorni* ‘red ant’ (§5.4.3.2). Since the /r/ sounds in /rda.rdu/ and /qro.rni/ are heterosyllabic, they do not violate the rhotic dissimilation constraint (§4.2.3.1).

1505 3.4.2 Uvular harmony

1506 Velars and uvulars do not coexist well within the same syllable in Japhug. There
 1507 are no syllables of the type $\dagger QCV\gamma$ or $\dagger KCV\kappa$ (where K and Q represent any velar
 1508 and uvular initial consonant, respectively): the onset and the coda have to be
 1509 both velars, or both uvulars. Thus, syllables such as *qra κ* ‘ploughshare’ and *kry γ*
 1510 ‘shear, mow’ are possible, but not $\dagger kra κ or $\dagger qry γ .$$

1511 With preinitials and medial consonants, the constraint depends on the context.
 1512 Several cases have to be distinguished.

1513 First, the uvular coda /- κ / is compatible with the velar medial /- γ -/, as shown
 1514 by examples such as *pya κ* ‘turn over’ (§4.2.2.5); the opposite case is not attested,
 1515 but given the relative rarity of medial /- κ -/, this may be accidental.

1516 Second, the uvular preinitial / κ -/ is attested before velar initials in some Ti-
 1517 betan loanwords, such as *ugra* ‘enemy’ (§4.2.2.4, from Tibetan རྒྱା dgra ‘enemy’).
 1518 The Tibetan preinitial *d*- normally corresponds to *r*- before velars, but the ex-
 1519 pected $\dagger rgra$ would have violated the rhotic dissimilation rule (§3.4.1).

1520 Third, a uvular preinitial with the velar medial /- γ -/ is only found in the di-
 1521 alectal word *tuu-χpyi* ‘thigh’ (§4.2.2.5).

1522 These constraints do not apply across syllables, as shown by words such as
 1523 *kórmuz* ‘only after’, in which the / κ / is the preinitial of the second syllable.

1524 The discrimination of uvulars and velars is due to a recent sound change that
 1525 occurred in Japhug and affected both native words and Tibetan loanwords, viz.
 1526 the uvularization of velar initial consonants in syllables with uvular /- κ /.
 1527 This sound change explains for instance why Japhug words such as *tuu-q^hoχpa* ‘organs,
 1528 state of mind’ (phonologically /q^hoχ.pa/ with internal sandhi) from Tibetan བྲྱ ཉ
 1529 ཉ ཁྱ ཉ ག ཉ ཁྱ ཉ ག ཉ ‘insides’⁴ has a uvular /q^h-/ corresponding to a velar /k^h-/ in Tibetan:
 1530 dorsal codas (transcribed as -*g*) are realized as uvulars after *a* and *o* in most Ti-
 1531 betan varieties (Gong 2016a), so that a correspondence of Tibetan *-ag* and *-og* to
 1532 Japhug /-a κ / and /-o κ / is expected. At an earlier stage, *tuu-q^hoχpa* has probably
 1533 been borrowed as **tuu-k^hoχpa* and the sound law *VELAR → UVULAR / _V κ applied
 1534 to it like in the rest of the vocabulary. In Tshobdun, there is a doublet of loan-
 1535 words corresponding to the same Tibetan etymon: *o-k^hoχpe* ‘its abdominal cavity’
 1536 (Sun & Blogros 2019: 413) without uvularization and *o-q^hχpe* ‘her heart’ (Sun &
 1537 Blogros 2019: 704) with uvularization.

1538 An older example of uvular harmony is found in the noun *q^haq^hu* ‘back of the
 1539 house’, ‘behind the house’ from *k^ha* ‘house’ and *u-q^hu* ‘behind’: this word has
 1540 a Tshobdun exact cognate *q^hvq^hu* (Sun & Blogros 2019: 172), showing that the
 1541 assimilation occurred in the common ancestor of the two languages.

⁴See §5.1.2.3 for an account of the prefix *tuu-*.

1542 3.5 Neutralization, quasi-neutralization and free variation

1543 The present section discusses four particularly thorny problems of synchronic
 1544 Kamnyu Japhug phonology, which are the source of uncertainty in some trans-
 1545 scriptions. They involve quasi-neutralization and interdialectal contact, which
 1546 constitute challenging problems for phonologists (see Michaud 2006).

1547 3.5.1 The contrast between /-oŋ/ and /-aŋ/

1548 Inherited Japhug words never have final -*ŋ* (in particular, proto-Gyalrong *-aŋ
 1549 shifts to -o, see §3.3.3); words with this coda belong to four groups: Tibetan loan-
 1550 words, ideophones, borrowings from other Gyalrong varieties (in the case of *rkaŋ*
 1551 ‘be robust’, the corresponding inherited Japhug etymon is *rko* ‘be hard’) or func-
 1552 tion words with irregular syllable fusion (*kɔŋla* ‘really’ from *kurjula*, see §22.2.4).

1553 Despite some minimal pairs (*caŋ* ‘dammed wall’ vs. *coŋ* ‘damage, loss’ from *glaŋ*
 1554 ‘dammed wall’ and *gloŋ* ‘loss’, respectively), the contrast between /-oŋ/
 1555 and /-aŋ/ in Kamnyu Japhug has some degree of instability: some words in /-oŋ/
 1556 and /-aŋ/, but not all, allow free variation between the two pronunciations. This
 1557 free variation is presumably due to influence from neighbouring dialects of Ja-
 1558 phug such as that of Rqakyo, where words with /-oŋ/ and /-oŋ/ in Kamnyu are
 1559 pronounced with a more open vowel.

1560 Words with stable -aŋ in final syllable include *rkaŋ* ‘be robust’, *fsaŋ* ‘fumiga-
 1561 tion’, *kʰuṛtʰaŋ* ‘administrative position’, *mkʰyrmaŋ* ‘people’, *prakʰaŋ* ‘cave’, *rnaŋ*
 1562 ‘be old’. In non-final position, stable -aŋ is found in particular in words whose fi-
 1563 nal syllable contains /a/, as in *fsrayma* ‘protecting deity’ (as opposed to unstable
 1564 *fsraŋ* / *fsraŋ* ‘protect’, see Table 3.10).

1565 Words with stable -oŋ in the final syllable include *coŋtca* ‘wood’ (as opposed
 1566 to *caŋβzu* / *coŋβzu* ‘carpentry’ with unstable rhyme), *kɔŋla* ‘really’, *pʰoŋ* ‘bottle’,
 1567 *qumdroŋ* ‘wild goose’, *zumbroŋ* ‘wild yak’ or *tuo-phoŋbu* ‘body’.

1568 Table 3.10 presents a list of words with unstable /-oŋ/ / -aŋ/, mostly loan-
 1569 words from Tibetan, coming either from rhymes in /a/+nasal or from rhymes
 1570 in rounded vowel+nasal. It also includes the egressive postpositions with *caŋ-* as
 1571 first element such as *coŋtaŋ* / *caŋtaŋ* ‘up from’ (see §8.2.10).

1572 For all these words, the orthography used in this work and in the corpus ge-
 1573 neralizes the -aŋ variant, which is considered by Tshendzin to be more ‘correct’.

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Table 3.10: Words with free variation between /-oŋ/ and /-aŋ/ in Kamnyu Japhug

/-aŋ/ variant	/-oŋ/ variant	Etymology
<i>raŋri</i> ‘each’	<i>roŋri</i>	բա՞ռ: <i>raŋ.re</i> ‘each’
<i>fsraŋ</i> ‘protect, save’	<i>fsroŋ</i>	բա՞ռն: <i>bsruŋs</i> ‘save’
<i>tʂanka</i> ‘(gold, silver) coin’	<i>tʂoŋka</i>	թա՞ն: <i>tam ka</i> ‘coin’
<i>çan-</i> ‘egressive’	<i>çon-</i>	

1574 3.5.2 The contrast between /u/ and /i/ after palatal and 1575 alveolo-palatal consonants

1576 The contrast between /u/ and /i/ is partially or completely neutralized after
1577 palatals (/c/, /c^h/, /j/, /ɲ/, /ɲ/ and /j/) and alveolo-palatal (/tç/, /tç^h/, /dʐ/,
1578 /ndʐ/, /ç/, /z/) consonants in some contexts.

1579 In stressed open syllables, in particular in word-final position, the contrast be-
1580 tween /u/ and /i/ is nevertheless very clear after all consonants. The existence
1581 of minimal pairs such as *cuu* ‘stone’ and *ci* ‘one’ or the stem alternations between
1582 *ndžuu* (stem I) and *ndži* (stem III) in the paradigm of the verb *ndžuu* ‘accuse’ (§12.2.2),
1583 show that this contrast is not neutralized after palatal and alveolo-palatal conso-
1584 nants in this context.

1585 The contrast between /u/ and /i/ is completely neutralized in most closed
1586 syllables and near-neutralized in unstressed syllables, including verbal suffixes,
1587 prefixes, and non-final elements of compounds; each of these contexts is exten-
1588 sively discussed below.

1589 3.5.2.1 Neutralization in closed syllables

1590 In closed syllables, the contrast between /u/ and /i/ is almost completely neu-
1591 tralized after palatals (/c/, /c^h/, /j/, /ɲ/, /ɲ/ and /j/) and alveolo-palatal (/tç/,
1592 /tç^h/, /dʐ/, /ndʐ/, /ç/, /z/) consonants; the archiphoneme {u,i} is realized as [u]
1593 before -y, -β (and the rare -p), and as [i] before -m, -r, -n and -l, as shown by Ta-
1594 ble 3.11. In the orthography adopted in the present work, the archiphoneme {u,i}
1595 is transcribed as *u* in all these contexts.

1596 The proof that the underlying phoneme is /u/ rather than /i/ is provided by
1597 the rhyme reduplication of *mtçur* ‘turn’ in the distributed action form *nymtçurlur*
1598 ‘turn in all directions’ (§19.4.2.1): if /i/ had been the underlying vowel, a form such
1599 as †[nymtçirlir] would have been expected.

Table 3.11: Realizations of the archiphoneme {u,i} following palatal and alveolo-palatal consonants in close syllables

Coda	Example	Realization
-β/-p	<i>cʰwβ</i> ‘ideophone of an object breaking’	[cʰwβ]
-γ	<i>rjwγ</i> ‘run’	[rjwγ]
-m	<i>jum</i> ‘be nice (of weather)’	[jim]
-n	<i>jaftçun</i> ‘stirrup’	[jaftçin]
-r	<i>mtçur</i> ‘turn’	[mtçir]
-l	<i>rnul</i> ‘wither’	[rnil]

1600 The contrast between /u/ and /i/ used to be neutralized before the codas -z
 1601 and -t, with the archiphoneme {u,i} realized as [i]. However, new rhymes -ut and
 1602 -uz contrasting with -it and -iz have been reintroduced by the transitive 1/2SG→3
 1603 past suffix -t or -z (depending on the dialect of Japhug, see §11.3, §21.1.3).

1604 Minimal pairs between open syllable -u stem verbs taking the -t suffix (such
 1605 as /tʂ-twɪ-cwɪ-t/ ‘you opened it’ AOR-2-open-PST) and -it stem verbs (/lʂ-twɪ-cɪt/
 1606 ‘you moved’ AOR-2-move) can easily be found (§3.3.2). Even if this contrast is
 1607 extremely marginal and restricted to this morphological context, /u/ and /i/
 1608 cannot be considered to be neutralized before -z or -t (depending on the dialect
 1609 of Japhug).

1610 3.5.2.2 Non-final elements of compounds

1611 In compounds and other polysyllabic stems, the contrast between /u/ and /i/
 1612 is very difficult to perceive in non-final open syllables with palatal or alveolo-
 1613 palatal consonant onsets, and Tshendzin has, during our decade-long collabora-
 1614 tion, expressed conflicting views about whether a contrast does or does not exist
 1615 in this context.

1616 While there are no minimal pairs only distinguished by the /u/ vs. /i/ contrast
 1617 in non-final syllables after palatal or alveolo-palatal consonants, it now seems
 1618 clear that some words are consistently pronounced with u rather than i in this
 1619 context. This unstable contrast, which does not carry much information load, is
 1620 likely to differ at the idiolectal level. The orthography used in this work reflects
 1621 a normalization based on Tshendzin’s judgements (rechecked several times).

1622 3.5.2.2.1 *tʂʰi°* vs. *tʂʰu°* Many nouns in Japhug have *tʂʰi°* or *tʂʰu°* as first ele-
 1623 ment, in particular due to words of Tibetan origin containing བ tsʰu ‘water’ or

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1624 མཚོ ‘*mtṣʰu* ‘lip’. The variant *tṣʰi*° is found in the great majority of these words. In
1625 some cases like *tṣʰira* ‘water jar’ (from བུ་ ‘*tṣʰu.ra* ‘water container’), I have used
1626 an etymologizing transcription with *u* (*tṣʰura*) in previous works (in particular
1627 Jacques 2015b), but changed my mind after careful rechecking (using for instance
1628 the stems I and III of the verb *tṣʰu* ‘gore’ for comparison).

1629 The variant *tṣʰu*° is essentially restricted to words with a cluster with a uvular
1630 or a labial fricative as first element (such as *rtaʰuṣjui* ‘caterpillar’, *tṣʰuṣpri* ‘newt’,
1631 *tṣʰuβroB* ‘type of tsampa’), but also found in *tṣʰumnyuy* ‘water hole’ (from བུ་ ‘*tṣʰu*’)
1632 *tṣʰu.mig* ‘water hole’) and *tṣʰuzu* ‘type of weaving tool’.

1633 The noun *tu-mtṣʰi* ‘mouth’ (from མཚོ ‘*mtṣʰu* ‘lip’) has an unexpected *i* (the ex-
1634 pected form would be †*mtṣʰu*). It is possible that it was extracted from a com-
1635 pound (like *tu-mtṣʰirme* ‘moustaches’) where /u/ and /i/ are neutralized as [i],
1636 and that this phonetic variant was then reinterpreted as an independent root.

1637 **3.5.2.2.2 *ndzi*° vs. *ndzu*°** Compounds with *ndzi*° or *ndzu*° as non-final element
1638 are not common, but social relation collective nouns (§ 5.7.8.1) containing the
1639 prefix *kyclndzi-*, are particularly numerous. Words with the variant *ndzu*° are very
1640 rare: the two verbs *ndzurput* ‘be numb’ and *andzuβri* ‘protect each other’ (with
1641 the rare reciprocal prefix *andzu-*/andzi- of denominal origin, see §20.2.5), and the
1642 nouns *ndzurwuz* ‘Sonchus sp’ and *ndzunu* ‘Angelica’ (minimal pair with *ndzi-nu*
1643 ‘their breast’, see § 3.5.2.4).

1644 **3.5.2.2.3 *ci*° vs. *cw*°** Compounds comprising *cw* ‘stone’ or the root of *tu-ci*
1645 ‘water’ as non-final element are common, and the majority of these words have
1646 the variant *ci*°, even when the noun comes from *cw* ‘stone’ (for instance *cixciz*
1647 ‘stony earth’). Exceptions include *curmbu* ‘stone heap’, *scwεzuy* ‘appearance’
1648 (from ཤྱେ.ଘ୍ରୟ ས୍କେ.ଘ୍ରୁସ ‘physical appearance’) and *yrciuqʰluβ* ‘making noise (of
1649 water when agitated)’.⁵

1650 **3.5.2.2.4 *cʰi*° vs. *cʰu*°** Nouns with *cʰi*° or *cʰu*° include in particular Tibetan loan-
1651 words in ག ‘*kʰi*’ ‘dog’. The form *cʰi*° occurs in most cases (for instance *cʰisnu* ‘rabies’
1652 from ག.ཞ ‘*kʰi.smio* ‘rabies’), but exceptions include *cʰumu* ‘female dog’, *cʰurdom*
1653 ‘roaming dog’ and *nucʰura* ‘keep guard’ (rechecked using the minimal pair *cʰi*
1654 ‘be sweet’ vs. *tx-cʰu* ‘wedge’).

⁵This verb is a denominal verbalization from a noun-ideophone compound (§5.5.3).

1655 3.5.2.2.5 *ʃi*^o vs. *ju*^o Words containing the status constructus of *ju* ‘bamboo’ can
1656 have either the vowel /i/ (as *jispjyt* ‘person making bamboo baskets’) or /u/ (1657
juŋgom ‘bamboo tweezers’). Other words in *ʃi*^o include *jiga* ‘tortuous path’ and
1658 its derived forms.

1659 The root of *tu-rju* ‘fortune’ commonly occur as first element of compounds,
1660 and have the vowel /u/, as in *rjurjom* ‘coveting other people’s fortune’. The
1661 syllable *-rju-* also occurs as the status constructus of *tr-rjut* ‘child’ in the word
1662 *trrjusti* ‘only child’.

1663 3.5.2.2.6 *ji*^o vs. *ju*^o Compounds with non-final *ju*^o are extremely rare, limited
1664 to the two Tibetan loanwords *jiuyi* ‘writing’ (from བེག་*ji.ge* ‘letter’) and *pjurul*
1665 ‘coral’ (from ཚུ་*b'u.ru* ‘coral’).

1666 3.5.2.3 Verbal prefixes and reduplicated forms

1667 The vowels /u/ and /v/ are by far the most common ones in prefixes in Japhug.
1668 In the case of verbal prefixes with palatal and alveolo-palatal onsets, the same
1669 phonological problem as in compounds (§ 3.5.2.2) is observed, namely the ques-
1670 tion whether the contrast between /u/ and /i/ has been neutralized or not, and
1671 whether the vowel should be transcribed as *i* rather than as *u*.

The prefixes in which this problem arises are few, and are exhaustively listed in Table 3.12. For prefixes in *cV*- and *c^hV*, testing the vowel is possible using minimal pairs (*cuu* ‘who’ vs. *ci* ‘polar interrogative’ and *c^hi* ‘be sweet’ vs. *tx-c^huu* ‘wedge’ as in § 3.5.2.2.4). For *pjV*- and *jV* prefixes, comparison is possible with the first syllable of the nouns *juyi* ‘writing’ and *pjuruu* ‘coral’ (§ 3.5.2.2.6).

The main consultants on the basis of whose expertise this work has been written have presented conflicting judgments regarding the nature of the vowel in these prefixes. After some hesitation, Tshendzin considers it to be *i* for all of these prefixes (for instance, she considers the vowel of *pjuru* ‘coral’ to be different from that of *pjiu-yi* ‘he comes down’). I nevertheless keep here the orthographic ‘etymological’ transcription with the vowel *u* for three reasons.

1683 First, the contrast is marginal, if existent at all, for most speakers, and given
1684 the limited number of prefixes affected, it is possible to automatically change the
1685 transcription from *u* to *i* only in these prefixes without loss of information (this
1686 can be necessary for instance as a pre-treatment for the purposes of automatic
1687 transcription training).

Second, the prefixes in Table 3.12 are affected by vowel fusion (§12.3) and coalescence with the inverse prefix *-wy* (§14.3.2.7) like other prefixes in *Cu-*, and

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1690 these morphophonological phenomena are easier to state by assuming the un-
1691 derlying vowel *u* for all prefixes.

1692 Third, the assimilation from *u* to *i* following palatal and alveolo-palatal con-
1693 sonants appears to be general in the morphology of the language, including par-
1694 tially reduplicated forms, whose rhyme is replaced by *-u* (§4.1). For instance,
1695 Tshendzin judges that the reduplicant here transcribed as *-cu-* of the reduplic-
1696 ated form *nycuce* ‘go everywhere’ (from *ce* ‘go’) to be phonetically closer to
1697 *ci* ‘polar interrogative’ than to *cu* ‘who’. Adopting a transcription with *i* in the
1698 prefixes in Table 3.12 would therefore only make sense if reduplicated forms of
1699 syllables with palatal and alveolo-palatal consonants are also transcribed with
1700 *i* (thus *nyc*i*ce* instead of *nycuce*). However, such an orthography would cause
1701 unnecessary problems when automatically researching for reduplicated forms
1702 in the corpus, and since in this case too the pronunciation of the grapheme *u*
1703 as /i/ is completely predictable, and could be corrected automatically without
1704 difficulty, I choose to keep an etymological transcription.

Table 3.12: Verbal prefixes with palatal or alveolo-palatal onsets and
high unrounded vowels

Prefix	Function	Reference
<i>pju/i-</i>	Orientation prefix, B-type, downwards	§15.1.1.1
<i>c^hu/i-</i>	Orientation prefix, B-type, downstream	§15.1.1.1
<i>jnu/i-</i>	Orientation prefix, B-type, westwards; sensory	§15.1.1.1
<i>juu/i-</i>	Proximative	§21.6.2
<i>c<u>u</u>/i-</i>	translocative associated motion	§ §15.2.1.2
<i>c<u>u</u>/i-</i>	apprehensive	§ §21.7.1
<i>c<u>u</u>/i-</i>	causative	§17.2.2.1
<i>c<u>u</u>/i-</i>	denominal	§20.3.2

1705 In other words, in the transcription adopted in this work I transcribe the con-
1706 trast between *u* and *i* before palatal and alveolo-palatals when non-predictable
1707 (in noun and verb stems), but neglect it and use *u* throughout in verbal prefixes
1708 and reduplicated syllables.

3.5.2.4 Verbal suffixes and possessive prefixes

1710 A few unstressed verb suffixes have alveolo-palatal onsets and high unrounded
1711 vowels: the dual indexation suffixes 1DU *-tci* and 2/3DU *-ndzi* (§14.2.1.1, §14.3.2.1)

and the suffix *-ci* (§11.4). It is clear that these suffixes originally had a schwa-like vowel rather than a front vowel as in most Gyalrong languages (see §14.8.1), but here too Tshendzin considers the vowel of these suffixes to be /i/ rather than /u/ (the suffix *-ci*, for instance, according to her resembles *ci* ‘one’ more than *cuu* ‘stone’), and since no vowel fusion or other phenomena takes place with these suffixes (unlike verbal prefixes), using an etymological notation was an unnecessary complication.

In the prefixal possessive paradigm (§ 5.1.1), we also find a series of prefixes with palatal and alveolo-palatal onsets and high unrounded vowels: 1DU *t̪i-*, 1PL *ji-* and 2/3DU *ndzi-*. Unlike verbal prefixes, but like the verbal indexation suffixes, possessive prefixes in the Kamnyu dialect of Japhug never undergo vowel fusion and remain invariable. The vowel is phonologically /i/, as shown by the minimal pair between *ndzunu* ‘Angelica’ and the dual possessive *ndzi-nuu* ‘their_{du} breast’ (§ 3.5.2.2.2). For these reasons, a phonological (with *-i*) rather than etymological (with *-u*) transcription was preferred for these prefixes.

3.5.3 The contrast between /v/ and /e/ after palatal and alveolo-palatal consonants

The vowels /v/ and /e/ in Kamnyu Japhug contrast in very few contexts. In word-final stressed open syllables, only /e/ is found, /v/ being attested only in clitics and unstressed final syllables in words such as *kunr* ‘also’. In closed syllables, /e/ is only found with the coda /-t/ in the past 2SG→3 of transitive -e stem verbs (§3.3.2); the word-final *-et* vs. *-vt* are the only cases where /v/ and /e/ are clearly contrastive.

In non-final open syllables, there are no examples of minimal pairs involving a contrast between /v/ and /e/. Phonetic [e] is clearly heard after palatal and alveolo-palatal consonants when the vowel of the following syllable is /e/, for instance in words such as *t̪eme* ‘girl’ or *s̪v̪yele* ‘extend (limbs)’, but in other contexts I generally transcribe v throughout, except when the word is an obvious compound whose elements are recognized by the speakers (for instance *t̪et̪a* ‘soon’ from *t̪e* ‘then’ and *t̪a* ‘soon’).

3.5.4 The contrast between /v/ and /a/

The contrast between /v/ and /a/, while clear in most contexts, is difficult to perceive in unstressed syllables when followed by a uvular (in particular when followed by a cluster with a uvular preinitial) and in syllables containing a (due to regressive assimilation of height, §3.3.1.2).

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1747 In slow syllable-by-syllable pronunciation, Tshendzin makes it clear that some
1748 unstressed syllables preceding a uvular have /a/ rather than /ɣ/. This concerns
1749 the indefinite possessor prefix in words such as *ta-zi* ‘younger sibling’, *ta-bru*
1750 ‘horn’, *ta-brt* ‘dirt’, *ta-ʂjuβ* ‘shadow’, *ta-brum* ‘light, shadow’, *ta-χpi* ‘shape, model’,
1751 *ta-bryt* ‘charcoal’, *ta-ʂjaz* ‘soot’ and *ta-ka* ‘free time’ (§ 5.1.2), and the fossilized
1752 prefix in nouns such as *taqaf* ‘needle’. The noun *tr-bar* ‘wing’, however, has *tr-*
1753 rather *ta-*.

1754 Another context where the variant *ta-* is found is with the *m-* initial nouns
1755 *ta-ma* ‘work’ and *ta-mar* ‘butter’. Note that a contrast exists with the honorific
1756 noun *tr-ma* ‘mother’ (§5.1.2), showing that the two allomorphs *tr-* and *ta-* are
1757 synchronically contrastive in the Kamnyu variety at least for some speakers.

1758 With some verbal prefixes, in particular the antipassive prefixes *rɣ-/ra-* and
1759 *sɣ-/sa-* (§18.6), the proprietive *sɣ-/sa-* (§18.8) and the tropative *nɣ(y)-/na-* (§17.5.1)
1760 and several denominal prefixes), the *a* allomorph is found where followed by a
1761 stem with a uvular preinitial. For instance, the antipassive of *χtu* ‘buy’ is *raxtu*
1762 ‘buy (things)’ with the variant *ra-* rather than *rɣ-*. Not all prefixes in *ɣ* present
1763 this alternation: for instance, the causative, facilitative and denominal prefixes
1764 *ɣr-* never have a variant *†ya-*.

1765 However, in the case of orientation preverbs (§15.1.1.1) and other inflectional
1766 prefixes, no such phonologically determined alternation is found. For instance,
1767 the A-type preverb *tr-* UPWARDS remains unchanged when preceding stems with
1768 a uvular preinitial as in *tr-χtu-t-a* (AOR-buy-PST:TR-1SG) ‘I bought it’, where the
1769 prefix *tr-* is different from the corresponding C-type preverb *ta-* in *ta-χtu* (AOR:3
1770 →3'-buy) ‘he bought it’.

1771 3.6 Speech errors and self-corrections

1772 The Japhug corpus, being exclusively an oral one, contains many speech errors,
1773 and immediate self corrections by the speakers, which have been systematically
1774 transcribed. Table 3.13 presents examples of phonological errors that are followed
1775 by self-corrections in the corpus.

1776 Phonological errors can result in the replacement of a word by a similar-sound-
1777 ing one (as in the case of *sqi* ‘ten’ for *sq^{hi}* ‘tripod’), but more often by a non-sense
1778 form. Errors generally involve one phonological feature at a time, including aspi-
1779 ration, nasality and place of articulation, especially the contrast between dental
1780 and alveolo-palatal affricates, and that between uvular and velars. A more puz-
1781 zling replacement is that of /χ/ by /r/ (*saxar* → *sara*) despite the absence of any
1782 common phonological feature between these two phonemes.

Table 3.13: Examples of self-corrections in the Japhug corpus

Erroneous form	Correct form	Error type	Reference
[sqi] ‘ten’	<i>sqʰi</i> ‘tripod’	aspiration	(160703 poucet3, 48)
[tuṣṇyr]	<i>tu-skṛma</i> ‘one cent’	nasal/oral	(150825 baishe zhuan-zh, 72)
[ts ^h o-]	<i>tʃ^horzi</i> ‘jar’	dental/alveolo-	(160703 araR, 49)
[tç ^h ur-]	<i>ts^hurjum</i> ‘often’	palatal	(160630 abao-zh, 112)
[sara-]	<i>saxar</i> ‘it is extremely...’	rhotic/uvular	(160712 smAG, 21)
[pwre]	<i>puu-ye</i> ‘when it comes’		(160715 kANWtal, 19)
[qapri]	<i>qapi</i> ‘white stone’		(160630 poucet1, 47)
‘snake’			
[tʂryaʂ]	<i>tʂrkaʂkci</i> ‘hunting dog’	velar/uvular	(niulan li de lu-zh, 4)
[wŋmo]	<i>w-jmjo</i> ‘his dream’	yod metathesis	(160630 abao-zh, 114)
[pjyka]	<i>pʂjka</i> ‘squash’		(150827 mengjiangnv-zh, 15)
[wŋri]	<i>w-ŋru w-n̩tsi</i> ‘one of her horns’	vowels	(160715 nWNa, 10)

¹⁷⁸³ The phoneme /j/ is particularly prone to metathesis, either within initial clusters (*wjmjo* → *wŋmo*, with fusion of /j/ and /ŋ/ as /ŋ/, see §4.2.1.9), or across vowels (*pʂjka* → *pjyka*).

3.7 Suprasegmentals

¹⁷⁸⁷ Unlike all other Rgyalrong languages, including Tshobdun (Sun 2005), Situ (Lin 2012) and Zbu (Gong 2018), Japhug has no tonal contrasts. However, there is morphologically determined stress. Phonological words only have one stress, which is located by default on the final syllable of the word (§3.8.1, §11.6.1).

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The personal agreement suffixes (§14.2.1, §11.3) and the peg suffix *-ci* (§11.4) never receive stress, and their vowels are optionally devoiced. For instance, *tʂndza-t-a* ‘I ate it’ (AOR-eat-PST-1SG) is realized as [tʂndzátɑ] or [tʂndzátɑ]. Stress can be antepenultimate in the case of verb forms with two suffixes as in *to-k-ʂmu-rpú-ndzi-ci* ‘they bumped into each other’ (IFR-PEG-RECIP-bump-DU-PEG).

There are only three verbal prefixes which can attract stress: the inverse *-wy-* (§14.3.2.7), the negative Sensory *múj-* (§13.1.1, §21.3.2.1), and the interrogative *u-* (§21.7.4.1). Outside of verbal morphology, the only other process that affects stress is the comitative adverb derivation (§5.8.1).

Some ideophones have emphatic stress on the first syllable (§10.1.5.4), but it is not phonologically distinctive.

A few function words have penultimate stress: *kúnṛ* ‘also’ (§9.1.6.1), *cínṛ* ‘not even one’ (§9.1.6.4), *nóṛmuz* and *kóṛmuz* ‘only after’ (§8.2.11).

3.8 Word structure

3.8.1 Wordhood

Although no native expression exists to designate ‘words’ in Japhug (as in the immense majority of the world’s languages, Dixon & Aikhenvald 2002), speakers have an intuitive notion of a minimal unit which can be object of metalinguistic discourse, as opposed to prefixes and suffixes.

The intuitive notion of ‘word’ can be correlated with some phonological and morphological criteria.

The clearest phonological criterion for wordhood is stress. Stress is by default word-final, and words have at most one stress. Most function words, including linkers (§25.1.6), determiners (§9.1), postpositions (§8.2) and even relator nouns (§8.3) lack stress (unless they receive special emphasis). In example (1), the stressed syllables are indicated by an acute accent, and the unstressed function words by a grave.

(1)	<i>tcè bʐymí ci pjx-tú-ndzi tcè tʂ-rzáβ nù tamú</i>
	LNK couple INDEF IFR.IPFV-exist-DU LNK INDEF.POSS-wife DEM ANTHR
	<i>pjx-rmí. tʂ-tʂú nù tsʰuráŋ pjx-rmí.</i>
	IPFV.IPFV-be.called INDEF.POSS-son DEM ANTHR IPFV.IPFV-be.called
	‘There was a couple, the wife was called Lhamo, and the man Tshering.’
	(28-qajdoskAt, 2)

There are only three groups of exceptions to word-final stress placement (for instance the unstressed suffix *-ndzi* in 1), as seen in the previous section (§3.7).

Given its predictability, stress is not noted in the transcription employed in this grammar, except on stress-attracting prefixes.

Among the morphological criteria for wordhood (§11.6), the scope of partial reduplication can be employed, at least for the word classes that allow it. Initial reduplication, almost exclusively restricted to verb forms (§12.4.1), applies to the *first syllable of the word* almost without exception.⁶ In the case of verbs, several additional morphological tests converge to indicate the same left boundary. For the right boundary of the words, partial reduplication is less useful, as it only applies to stems (§12.4.2): inflectional suffixes are never reduplicated.

Inflectional suffixes (§11.3), in particular person indexation suffixes (§14.2.1.1, §14.2.1.2), do present clitic-like properties, since they are not stressed, and are outside the scope of reduplication. However, these morphemes cannot be isolated, follow a rigid order, have non-adjacent dependencies with verbal prefixes (§11.4), and no external element can be inserted between them. Moreover, the 1SG marker *-a*, despite being unstressed when following consonant-final verb stems, undergoes fusion with vowel-final stems (§3.3.1.3), causing vowel mergers. The verbal word in Japhug is thus slightly larger than the prosodic domains of stress and partial reduplication (Schiering et al. 2010).

There are, however, three problems challenging the notion of ‘word’ in Japhug: clitized sentence final particles (§11.6.2), bipartite verbs (§11.6.3) and prenominal attributes (§9.1.8.2) when they receive no stress. These issues are discussed in more details in the relevant sections.

3.8.2 Non-final syllables

Putting aside function words, monosyllables are considerably less common than polysyllables in Japhug; in particular, verbs can be monosyllabic only in one form of their paradigm (3SG Factual Non-past, §21.3.1.1), and inalienably possessed nouns are always at least disyllabic (§5.1.2).

The stem-final syllable (excluding inflectional suffixes), in addition to having stress by default, is also generally the part of the word with the maximum of phonological contrasts. Since polysyllabic roots are rare, non-final syllables are in the immense majority of cases either prefixes or compound roots.

Prefixes have strong phonotactic constraints: with the sole exception of some orientation preverbs (§15.1.1.1), their main vowels are always /ɯ/ (including [i] in contexts where the contrast is neutralized or quasi-neutralized §3.5.2), /ɤ/ and

⁶The only exception is the reduplicated subject participle *kuu~kuu-tu* of the existential verb *tu* ‘exist’, which can take (non-reduplicated) possessive prefixes, but this may be a lexicalized form (§12.4.1.5).

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/a/, and they cannot have aspirated or plain voiced consonants. Specific classes of prefixes have even stricter constraints: productive nominalization prefixes can only be obstruents (§16) and verbal derivation prefixes (Chapters 17, 18, 19 and 20) can only contain nine consonants: /m/, /n/, /s/, /z/, /tʃ/, /z/, /r/, /j/ and /χ/ (a subset of the consonants that occur as preinitials, §4.2).

Roots occurring as non-final elements of compounds do not have such stringent constraints on consonants, but due to a process of rhyme reduction (*status constructus*, §5.4.1), most vowels are converted to either /u/ or /y/.

Hence, in non-final syllables, the vowels are mostly restricted to /a/, /u/, or /y/, the latter two being subject to rounding by vowel harmony (§3.3.1.2) or assimilation with /w/ (§4.2.1.1, §4.2.2.4, §14.3.2.7). An example of a typical Japhug word is the verb form /at̚tuzyy̚y̚zó/ (2), which has a vowel other than /a/, /u/, or /y/ only in the last syllable.

- 1871 (2) *a-t̚-tu-zyy-y̚-zo*
IRR-PFV-2-REFL-CAUS-be.light
1872 ‘Make yourself light.’ (from 59, §18.3.4.1)

1873 Vowels other than /a/, /u/, or /y/ in non-final syllables of verb and nouns
1874 stems are only found in four cases. First, there is a handful of synchronically
1875 unanalyzable polysyllabic nominal and verbal stems with /o/, /u/ or /i/ in non-
1876 final syllables, for instance *NGOčna* ‘spider’, *juli* ‘flute’ or *nupodudi* ‘tickle’. Second,
1877 compounds whose first element does not undergo *status constructus* can preserve
1878 any vowel (for instance *qrormbu* ‘anthill’ from *qro* ‘ant’ and *rmbu* ‘pile up’). Third,
1879 Tibetan loanwords, especially in the most recent layers (§3.3.3), are not subject to
1880 the phonotactic constraints of native nouns and allow any combination of vowels
1881 (for instance *loŋbutčʰi* ‘elephant’ from ལོང་བོད་ཆེ ཁྱାଲ ‘elephant’).

¹⁸⁸² 4 Consonant clusters and partial reduplication ¹⁸⁸³

¹⁸⁸⁴ 4.1 Partial Reduplication

¹⁸⁸⁵ A useful test to analyse and classify clusters is partial reduplication ([Jacques 2007](#)), a very productive process which can be applied to both verb and noun stems and has a variety of morphosyntactic functions depending on the position of the syllable affected by reduplication.

¹⁸⁸⁹ Partial reduplication of the first syllable of the verbal complex can mark the protasis of a conditional construction ([§12.4.1.2](#)), iterative coincidence ([§12.4.1.3](#)), degree incrementation ([§12.4.1.4](#)) and totalitative relativization ([§12.4.1.5](#)).

¹⁸⁹² When the target of partial reduplication is the last syllable of the verb, it can indicate emphasis ([§12.4.1.6](#), [§12.4.3](#)), and also serve as a secondary exponent ([§12.4.2](#)) of several derivational processes, such as reciprocal ([§18.4.1](#)), distributed action ([§19.4](#)), auto-evaluative ([§19.5](#)), attenuative ([§19.6](#)), as well as some non-finite verb forms (gerund [§16.6.1](#) and purposive converb [§16.6.2](#)). Outside of verbal morphology, we find partial reduplication in comitative adverbs ([§5.8.1](#)), perative ([§5.8.2](#)) and collectives ([§5.7.8.2](#)). There are in addition a few sporadic cases of full reduplication ([§19.7.11](#), [§18.6.5](#)).

¹⁹⁰⁰ When partial reduplication is applied to a syllable, the rhyme of the reduplicated syllable is changed to /u/ in the reduplicant (other types of partial reduplication are treated in [§19.4.2](#)). This vowel can undergo rounded assimilation to [u] when the base syllable has the main vowel /u/ or /o/ ([§3.3.1.2](#)).

¹⁹⁰⁴ Some clusters are only partially copied: when the last consonant of a cluster is one of the non-nasal sonorants (/r/, /l/, /j/, /w/, /γ/ or /β/), and the preceding consonant is neither a non-nasal sonorant nor a sibilant or alveolo-palatal fricative, the sonorant is deleted, as in the gerund of *mbyom* ‘cut’, which yields *s^r-mbu~mbyom* (example [245](#), [§16.6.1.3](#)) instead of †*s^r-mbyu~mbyom*, or the emphatic form *k^hu~k^hro* from *k^hro* ‘much’ ([§26.1.1.2](#)), instead of †*k^hru~k^hro*.

¹⁹¹⁰ However, in *some* of the clusters ending in a non-nasal sonorant, but whose penultimate consonant is either a non-nasal sonorant, a sibilant (/s/, /z/) or an

4 Consonant clusters and partial reduplication

1912 alveolo-palatal fricative (/ç/, /ʐ/), the final sonorant is not deleted in partial redu-
1913 plication. For instance, the emphatic reduplication of the infinitive of *açṛṛyi* ‘be
1914 quick’ is *kuu-ṛçṛṛyu~ṛyi* (1), not †*kuu-ṛçṛṛu~ṛyi*, and the perlicative (§5.8.2) of *tr-*
1915 *jroʂ* ‘trace’ is *wi-jru~jroʂ* ‘following X’s trace’, not †*wi-ju~jroʂ*.

- 1916 (1) *kuu-ṛçṛṛyu~ṛyi zo, tu-su-mtcur ngryl*
1917 INF:STAT-EMPH~be.quick EMPH IPFV-CAUS-turn be.usually.the.case:FACT
‘It makes it turn very quickly.’ (18-NGolo, 140)

1918 However, in the cluster *rj*- for instance, the glide *j* is deleted, as in the nega-
1919 tive gerund *masṛrurju* ‘quietly, in secret’ from *arju* ‘speak’ (§16.6.1.2). A precise
1920 inventory of the clusters with sonorant deletion is provided in §4.2.2 and §4.2.3.

1921 Partial reduplication is crucial in analyzing and classifying consonant clusters.
1922 Sonorants that undergo deletion when partial reduplication is applied are hence-
1923 forth designated as *medial* consonants (corresponding to the terms 介音 <jièyīn>
1924 ‘medial’ in the Chinese phonological tradition and རྒྱାଣ୍ୟକ བྲାଙ୍ୟକ ‘dogs.tcan ‘attached let-
1925 ter’ in the Tibetan one) and do not belong to the same phonological constituent
1926 as the rest of the onset.

1927 4.2 Inventory of consonant clusters

1928 Japhug counts at least 423 clusters in syllable onset position: 319 clusters with
1929 two consonants and 104 with three consonants.¹ In addition, there are additional
1930 types of consonant clusters across syllable boundaries (§4.2.3.1) and secondary
1931 clusters due to vowel fusion (§3.3.1.3), which are too numerous to be systemati-
1932 cally surveyed. While the number of clusters in Japhug is considerably smaller
1933 than that of Khroskyabs, which counts as many as 757 (Lai 2017: 101), it is still
1934 much richer than most languages in the Trans-Himalayan family.

1935 In the following discussion, phonemes or clusters found exclusively in ideo-
1936 phones (§10.1) or Tibetan loanwords are systematically indicated, in order to
1937 bring out the phonotactics of inherited Japhug vocabulary. For each cluster, an
1938 example is provided; in the case of verb roots, the base stem is indicated, rather
1939 than a conjugated form (unlike what was done in Jacques 2019b).

¹A few new clusters have been discovered since the article Jacques (2019b), which counted fewer clusters, was written.

4.2.1 Preinitials

This section deals with consonant clusters whose last consonant is not one of the six non-nasal sonorants (/r/, /l/, /j/, /w/, /y/ or /v/) and thus cannot contain a medial consonant.

Clusters of this type have a limited number of possible consonants in first position: /w/, /s/-/z/, /ç/-/z/, /l/, /ʂ/-/r/, /j/, /x/-/y/, /χ/-/v/, /n/, /m/ and the homorganic nasal, to which must be added a few clusters in stop+/ç/. These consonants, which correspond to both གྲྷ-ଘྱ- ཟ୍ୟୋନ୍ ཉଡ଼ୟୁଗ୍ ‘prefixed letter’ and གྲྷ-ଘྱ- ມ୍୻୦-ତ୍ୟାନ୍ ମ୍ଗୋତ୍ୟାନ୍ ‘superscript letter’ in Tibetan traditional phonology, and are referred to as *preinitial*. The last consonant of these clusters is called the *initial* (ମିର୍ଗ୍ୟାନ୍ ମିର୍ଗ୍ୟାନ୍ ‘radical letter’ in Tibetan). The following sections list clusters by preinitial, and in each table present them by place and mode of articulation of the initial. Clusters with three consonants are dealt with separately.

It is striking that (except in the stop+ç-clusters, which are secondary, §4.2.1.10), all preinitials are continuants, either sonorants or fricatives: there are no stop preinitials in Japhug, unlike in Situ, which allows labial and velar stops (Zhang 2016: 44). The preinitial stops *p*- and *k*- in Situ regularly correspond to Japhug /w-/ and /x/y-/ or /χ/v-/, suggesting that a general rule of preinitial fricativization took place in Japhug (Jacques 2004: 273).

4.2.1.1 /w/+C clusters

Table 4.1 lists all consonant clusters in Japhug with /w/ as first element not ending in a non-nasal sonorant.

The phoneme /w/ has fricativized allophones when occurring as first member of a consonant cluster (§3.2.1), transcribed here as *f*- before unvoiced obstruents, and *β*- before all voiced consonants. It does not appear before nasal or prenasalized segments, due to a nasalization rule **wN-* → *mN-*, attested notably in the irregular *m*- allomorph of the *yr*- causative (§17.3.1). It cannot be followed by any of the labial consonants: for instance †*fp*- and †*βb*- are not acceptable onsets. Some clusters with /w/ + voiced obstruents (*βz*- and *βg*-) are only attested in Tibetan loanwords.

Clusters with three consonants whose first element is /w/ and the last one is not a sonorant are all restricted to Tibetan borrowings (verb forms with the past tense *b*- prefix, for example *βzjur* from བ୍ୟୁର୍ བ୍ୟୁର୍ ‘change’) except for /wxt/, which is realized as [xʷt] with a labiovelarized fricative, rounding the preceding unrounded vowels /u/ and /v/: the participle *ku-wxti* ‘the big one’ is realized as [kuxʷti]. Not all speakers maintain the contrast between /wxt/ and /xt/; the verb *wxti* ‘be big’ is the only item with this cluster.

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Table 4.1: List of consonant clusters with /w/ as a first element (15+8); clusters only found in Tibetan loanwords are shaded in light grey.

/t/	/wt/	<i>wu-ftax</i> ‘sign’
/d/	/wd/	<i>βdut</i> ‘demon’
/ts/	/wts/	<i>ftsok</i> ‘female hybrid yak’
/ts ^h /	/wts ^h /	<i>fts^hi</i> ‘feel better’
/s/	/ws/	<i>fsaq</i> ‘fumigation’
/z/	/wz/	<i>βzajsa</i> ‘friend’
/tç/	/wtç/	<i>ftçar</i> ‘summer’
/tç ^h /	/wtç ^h /	<i>ftç^hur</i> ‘put vertically’, ‘pour down’
/ç/	/wç/	<i>fçar</i> ‘repent’
/z/	/wz/	<i>βzar</i> ‘buzzard’
/tʂ/	/wtʂ/	<i>ftʂi</i> ‘melt’
/c/	/wc/	<i>tuu-fcaṛ</i> ‘dorsal mat’
/j/	/wj/	<i>βji</i> ‘chase, catch up with’
/k/	/wk/	<i>fka</i> ‘be full’
/g/	/wg/	<i>βgoz</i> ‘prepare’
	/wxt/	<i>wxti</i> ‘it is big’
	/wst/	<i>fstun</i> ‘serve’, ‘treat’
	/wrt/	<i>frtyṇ</i> ‘be trustworthy’
	/wsk/	<i>fskyṛ</i> ‘go around’
	/wzg/	<i>βzgyṛ</i> ‘delay’
	/wzd/	<i>βzdu</i> ‘collect’
	/wzj/	<i>βzjpur</i> ‘transform’
	/wrj/	<i>βrjaṛ</i> ‘stretch’ (skin)

1977 Non-segmental realizations of /w/, limited to vowel rounding, are also found
 1978 in the group *wyr-* (treated in §4.2.2.4) and the inverse prefix *wy-* (§14.3.2.7).

1979 4.2.1.2 Sibilant+C clusters

1980 Table 4.2 lists all consonant clusters with a sibilant fricative /s/ or /z/ as first
 1981 element not ending in a non-nasal sonorant.

1982 The contrast between /s/ and /z/ is neutralized before obstruents: we find *s-*
 1983 before unvoiced stops, fricatives and affricates and *z-* before voiced ones (includ-
 1984 ing prenasalized stops). With nasals, a contrast is found between *sm-* and *sn-* on
 1985 the one hand, and their voiced counterparts *zm-* and *zn-* on the other hand. The

4.2 Inventory of consonant clusters

Table 4.2: List of consonant clusters with /s/ or /z/ as a first element
(23+0)

/p/	/sp/	<i>spoz</i> ‘incense’
/b/	/zb/	<i>zbaꝝ</i> ‘be dry’
/mb/	/zmb/	<i>tꝝzmbur</i> ‘silt’
/m/	/sm/	<i>smar</i> ‘river’
	/zm/	<i>zmaq^hu</i> ‘cause to be late’
/t/	/st/	<i>staxpu</i> ‘pea’
/t ^h /	/st ^h /	<i>st^haꝝ</i> ‘touch’
/d/	/zd/	<i>zdum</i> ‘cloud’
/nd/	/znd/	<i>znde</i> ‘wall’
/n/	/sn/	<i>sna</i> ‘be good’
	/zn/	<i>znyja</i> ‘find X a shame’
/c/	/sc/	<i>scor</i> ‘scoop’
/c ^h /	/sc ^h /	<i>sc^hyt</i> ‘recede’ (water)
/j/	/zj/	<i>nuzju</i> ‘suffer losses’
/ŋj/	/zŋj/	<i>zŋja</i> ‘plant sp.’
/p/	/sp/	<i>spajne</i> ‘fasting’
/k/	/sk/	<i>skym</i> ‘ox’
/k ^h /	/sk ^h /	<i>rjysk^hi</i> ‘pan’
/g/	/zg/	<i>zga</i> ‘sauce’
/ŋg/	/zŋg/	<i>ak^hyzŋga</i> ‘shout, call’
/ŋ/	/sŋ/	<i>sŋaꝝ</i> ‘curse’
/q/	/sq/	<i>sqamnuz</i> ‘twelve’
/q ^h /	/sq ^h /	<i>sq^hi</i> ‘tripod’

latter are only found in morphologically complex nouns or verbs, as several sibilant prefixes, including the causative (§17.2.1.1), the oblique participle (§16.1.3.1), the gerund (§16.6.1.1), the abilitative (§19.3) have z- allomorphs when prefixed to polysyllabic stems whose first syllable has a single sonorant followed by a vowel. In particular, *zmaq^hu* ‘cause to be late’ and *znyja* ‘find X a shame’ in Table 4.2 are the causative derivations of *maq^hu* ‘be after’, ‘be late’ (§20.6) and *nyja* ‘be a shame’ (§17.2.5.9), respectively.

Before non-nasal sonorants, a voicing contrast is attested between /sj-/ vs. /zj-/ (§4.2.2.2), /sl-/ vs. /zl-/ (§4.2.2.3), /sr-/ vs. /zr-/ (§4.2.2.4) and /sy-/ vs. /zy-/ (§4.2.2.5).

The sibilant preinitials are compatible with all stops, but do not occur with

4 Consonant clusters and partial reduplication

affricates, whether dental, alveolo-palatal or retroflex, except in heterosyllabic clusters (§4.2.3.1). The loanword *koxtçun* ‘brocade’ from گۆتكۈن gos.tç^hen ‘brocade’ suggests that a sound change *stç- → xtç- has removed all instances of sibilant+alveolo-palatal clusters.

The aspiration contrast in unvoiced stops and affricates is not neutralized after the *s-* preinitial, as shown, for instance, by the minimal pair *st^hor* ‘push’, ‘press’ vs. *stor* ‘broad bean’.

4.2.1.3 /l/+C clusters

There are considerably fewer clusters with an /l/ preinitial than with other preinitials. These clusters are listed in Table 4.3. They contain a high proportion of ideophones and Tibetan loanwords, as the genuine proto-Gyalrong **l-* preinitial has changed to *j-* in most contexts (§4.2.1.6).

Table 4.3: List of consonant clusters with /l/ as a first element (17+1); light grey shading indicates clusters only attested in Tibetan loanwords, and dark grey clusters only found in ideophones.

/p/	/lp/	<i>tuu-lp̥y</i> ‘one piece’
/m/	/lm/	<i>tr̥lmuz</i> ‘straw covering the balcony’
/t/	/lt/	<i>lt̥vβ</i> ‘fold’
/t ^h /	/lt ^h /	<i>lt̥humumi</i> ‘coming slowly (sleep)’
/d/	/ld/	<i>lduyi</i> ‘bharal’
/n/	/ln/	<i>lni</i> ‘wither’
/ts/	/lts/	<i>cyltsax</i> ‘leather coat’
/ts ^h /	/lts ^h /	<i>lts^hylts^hyrt</i> ‘small and weak’
/tç/	/ltç/	<i>rtr̥ltçax</i> ‘horse whip’
/tç ^h /	/ltç ^h /	<i>ltç^hyltç^hyrt</i> ‘hanging’ (of fluffy objects)
/dʐ/	/ldʐ/	<i>ldʐajkui</i> ‘green’
/dz/	/ldz/	<i>ldʐajldʐaj</i> ‘hanging’ (big object)
/c/	/lc/	<i>lcuylcuyl</i> ‘drenching’
/c ^h /	/lc ^h /	<i>tu-lc^huy</i> ‘one section’ (of a bag)
/ŋ/	/lŋ/	<i>ljyyljyrt</i> ‘hanging’ (fruit)
/x/	/lx/	<i>lxvβlxvβ</i> ‘thick’ (clothes)
/q/	/lq/	<i>lqymylqyt</i> ‘toddling’
	/lpç/	<i>qalpça</i> ‘open’ (fern leaf)

2009 A possible example of an additional cluster /lŋ-/ is found in the verb *nundzu-*
 2010 *lŋuz* ‘doze off’, but both /nɯ.ndzwi.lŋuz/ and *nu.ndzui.lŋuz* are possible syllabi-
 2011 fications.

2012 The cluster /pʂ-, only attested in *qalpea* ‘open’ (of fern leaf), is discussed further
 2013 in §4.2.1.10.

2014 4.2.1.4 /r/+C clusters

2015 Table 4.4 lists all consonant clusters not ending in a non-nasal sonorant with the
 2016 rhotic /r/ or its unvoiced counterpart, the retroflex fricative /ʂ/, as first element.

2017 The contrast between /r/ and /ʂ/ is almost completely neutralized in preini-
 2018 tial position, the former occurring with voiced obstruents, and the latter with
 2019 unvoiced ones. The symbol *r* is used in the orthography employed in this gram-
 2020 mar for the archiphoneme {r,s} preceding obstruents, except in the group *sχ*.

2021 However, a contrast between /r/ and /ʂ/ is found before sonorant initials, in
 2022 particular with the palatal nasal (/ʂn-/ vs. /rn-/), the velar nasal (/ʂŋ-/ vs. /rŋ-/)
 2023 and the velar fricative (/ʂʂ-/ vs. /ry-/ see §4.2.2.5).

2024 When preceding sonorants, /r/ is initial when occurring before *w* and *j* (§4.2.2.1,
 2025 §4.2.2.2), but preinitial in *rl*-, *ry*- and *rň*- (§4.2.2.3, §4.2.2.5, §4.2.2.6).

2026 There is one case of a preinitial *r* apparently originating from a rhotacized
 2027 sibilant, in the verb form *arnčlum* ‘be caved in’ (§4.2.2.3, §19.7.9).

2028 4.2.1.5 Alveolo-palatal+C clusters

2029 Table 4.5 lists all consonant clusters with an alveolo-palatal fricative /ç/ or /ʐ/
 2030 as preinitial and not ending in a non-nasal sonorant.

2031 As in the case of the sibilant preinitials *s*- and *z*-, the voicing contrast between
 2032 /ç/ and /ʐ/ is neutralized in preinitial position before obstruents, the former
 2033 occurring when followed by unvoiced stops, fricatives and affricates, and the
 2034 latter when followed by voiced ones.

2035 A voicing contrast is attested between /çn-/ and /ʐn-/ but the latter only oc-
 2036 curs when the *ʐ*- allomorph of the translocative prefix (§15.2.1.2) precedes the
 2037 A-type *nu*- or C-type *na* ‘westward’ orientation preverbs (§15.1.1.1), as in exam-
 2038 ples (97) (§9.1.5.2) and (4) (§11.2.2).

2039 Before non-nasal sonorants, the voiced contrast is attested between /çl-/ vs.
 2040 /ʐl-/ (§4.2.2.3, also only with the translocative prefix), /çr-/ vs. /ʐr-/ (§4.2.2.4)
 2041 and /çʂ-/ vs. /ʐʂ-/ (§4.2.2.5).

2042 Unlike sibilant preinitials, alveolo-palatal preinitials are compatible with affri-
 2043 cates of all places of articulation, even alveolo-palatal affricates in the cluster

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Table 4.4: List of consonant clusters with /r/ and /ʂ/ as a first element
(35+0)

/p/	/sp/	<i>tuu-rpa</i> ‘axe’
/p ^h /	/ʂp ^h /	<i>rp^hʂrp^hʂβ</i> ‘flapping wings’
/mb/	/rmb/	<i>armbat</i> ‘near’
/m/	/rm/	<i>rmyʂja</i> ‘peacock’
/t/	/ʂt/	<i>rtału</i> ‘horse year’
/t ^h /	/ʂt ^h /	<i>w-pʂrt^hʂβ</i> ‘middle’
/d/	/rd/	<i>rdʐstaʂ</i> ‘stone’
/nd/	/rnd/	<i>rnde</i> ‘find’
/n/	/rn/	<i>rnaʂ</i> ‘be deep’
/ts/	/ʂts/	<i>rtsot</i> ‘vengeance’
/ts ^h /	/ʂts ^h /	<i>rts^hom</i> ‘have a crack’ (bucket)
/dz/	/rdz/	<i>rdzardza</i> ‘insolent’
/ndz/	/rndz/	<i>rndzʂkʂje</i> ‘shade of the mountain’
/s/	/ʂs/	<i>rsuʂrsuʂ</i> ‘hairy’
/z/	/rz/	<i>tuu-rzuy</i> ‘one section’
/tʂ/	/ʂtʂ/	<i>nurtʂa</i> ‘tease’
/tʂ ^h /	/ʂtʂ ^h /	<i>rtʂ^huʂjw</i> ‘caterpillar’
/ndʐ/	/rndʐ/	<i>cirndzi</i> ‘sand’
/ʂ/	/ʂʂ/	<i>rʂuʂrʂuʂ</i> ‘rough’
/ʐ/	/rʐ/	<i>tr-rʐaʂ</i> ‘wife’
/c/	/ʂc/	<i>tr-rcoʂ</i> ‘mud’
/c ^h /	/ʂc ^h /	<i>w-rc^harc^hʂβ</i> ‘interstice’
/j/	/rj/	<i>rjaʂ</i> ‘dance’
/ɲ/	/rŋj/	<i>rŋjaʂlo</i> ‘bolt’
/ɲ/	/ʂɲ/	<i>ʂnoʂʂnoʂ</i> ‘long and thin’
	/rɲ/	<i>rŋaj</i> ‘be ancient’
/k/	/ʂk/	<i>rko</i> ‘be hard’
/k ^h /	/ʂk ^h /	<i>tr-rk^hom</i> ‘feather rachis’
/g/	/rg/	<i>rga</i> ‘like’
/ɳg/	/rŋg/	<i>rŋgym</i> ‘hard piece’
/ɳ/	/rŋ/	<i>tuu-rŋa</i> ‘face’
/q/	/ʂq/	<i>rqoʂ</i> ‘hug’
/q ^h /	/ʂq ^h /	<i>tr-rq^hu</i> ‘bark, skin’
/NG/	/rNG/	<i>ʂwurNGo</i> ‘Anisodus tanguticus’
/χ/	/ʂχ/	<i>sʂwusʂi</i> ‘with big nostrils’

Table 4.5: List of consonant clusters with /ç/ and /z/ as a first element
(18+0)

/p/	/cp/	çpas ‘be thirsty’
/p ^h /	/cp ^h /	çp ^h yt ‘patch’ (vt)
/mb/	/zmb/	zmbyr ‘ulcer’
/m/	/cm/	çmi ‘mix’
/t/	/ct/	çte ‘contaminate’
/t ^h /	/ct ^h /	çt ^h uz ‘turn towards’
/d/	/zd/	zduyzduy ‘strong, tough’
/n/	/çn/	çnat ‘heddle’
	/zn/	z-nuu-çar ‘go and look for it’
/ts/	/cts/	çrjctsə ‘foreman’
/tç/	/ctç/	srtçuy ‘strap’ (to carry children on the back)
/tʂ/	/ctʂ/	çtʂanlay ‘hanging and swinging’
/k/	/çk/	çkom ‘muntjac’
/k ^h /	/çk ^h /	çk ^h o ‘spread’
/g/	/zg/	zgaç ‘exactly’
/ŋg/	/zŋg/	zŋgu ‘cross river’
/ŋ/	/çŋ/	çŋaççŋas ‘bright yellow’
/q/	/cq/	çqrjyr ‘cross-eyed’
/q ^h /	/cq ^h /	çq ^h alor ‘latch’
/NG/	/zNG/	zNGulor ‘walnut’

2044 çtç- found in the noun *srtçuy* ‘strap’ (to carry children). There is evidence, how-
 2045 ever, that *çts^h- dissimilated to jts^h- in the irregular causative *jts^hi* ‘give to drink’
 2046 (§4.2.1.6, §17.2.2.5).

2047 There are two examples of alveolo-palatal preinitials followed by a palatal seg-
 2048 ment: zŋ- and çc^h-, but they are not stable and hence not included in Table 4.5.
 2049 They only occur when the z- and ç- allomorphs of the translocative prefix are
 2050 found before the B-type *jnu-* and *c^hu-* or the D-type *jr-* and *c^hr-* ‘westward’ and
 2051 DOWNSTREAM orientation preverbs. These clusters are always in free variation
 2052 with zŋ- and çc^h-, respectively, which are considerably more common (Table 15.10,
 2053 §15.2.1.2), since the translocative prefix generally undergoes a palatal dissimila-
 2054 tion rule to a dental fricative s- or z- when it precedes a palatal consonant. The
 2055 non-dissimilated clusters çc^h- and zŋ- are extremely rare: the former is only at-
 2056 tested in one single example in the corpus (2), and the second in a handful of
 2057 verb forms (see for instance 178, §15.2.1.2). These non-dissimilated forms are un-

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2058 doubtlessly due to analogical levelling, which generalized the alveolo-palatal allo-
2059 morphs of the translocative.

- 2060 (2) *a-t^hui-γ<nu>k^hu* *cti* *ma azo*
 IRR-PFV:DOWNSTREAM-<AUTO>call be.AFF:FACT LNK 1SG

2061 *c-c^hui-zyγ-βde-a* *cti* *ma*
 TRAL-IPFV:DOWNSTREAM-REFL-throw-1SG be.AFF:FACT LNK

2062 ‘Let her call (me), I am going to throw myself (in the river).’ (22-qajdo, 55)

Secondary clusters with alveolo-palatal preinitials are created by prefixes with the shape *ç*- or *ȝ*-, including allomorphs of the translocative as mentioned above (§15.2.1.2), but also irregular causatives (§17.2.2.3, §17.2.2.4) and perhaps lexicalized oblique participles (§16.1.3.10).

2067 4.2.1.6 /j/+C clusters

Table 4.6 lists all consonant clusters with the semi-vowel /j/ as first element not ending in a non-nasal sonorant. It cannot precede alveolo-palatal obstruents and palatal stops.

Table 4.6: List of consonant clusters with /j/ as a first element (12+1)

/p/	/jp/	<i>jpu</i> m ‘be thick’
/m/	/jm/	<i>jmu</i> t ‘forget’
/t/	/jt/	<i>ajtu</i> ‘accumulate’
/nd/	/jnd/	<i>sxjndxt</i> ‘be cute’
/n/	/jn/	<i>jnom</i> ‘be flexible’
/ts/	/jts/	<i>tr-jtsi</i> ‘pillar’
/ts ^h /	/jts ^h /	<i>jts^hi</i> ‘give to drink’
/tʂ ^h /	/jtʂ ^h /	<i>qajtʂ^ha</i> ‘vulture’
/ndz/	/jndz/	<i>jndzyz</i> ‘be thick’ (powder)
/k/	/jk/	<i>tr-jku</i> z ‘secret’
/ŋ/	/jŋ/	<i>tr-jŋo</i> z ‘hook’
/q/	/jq/	<i>jqu</i> ‘be able to lift’
/χ/	/jχ/	<i>ajχo</i> z ‘be flat’ (belly)
	/jmŋ/	<i>tuu-jmŋo</i> ‘dream’

Most of these clusters violate the sonority sequencing principle (§4.2.3.2), but those that are attested in verb roots (such as *jpum* ‘be thick’) can occur in word-initial position in the Factual Non-Past (§21.3.1).

2074 Comparison with Zbu reveals that one of the sources of the Japhug *j*- preinitial is proto-Gyalrong **l*- (Jacques 2004: 271–272): for instance *jmut* ‘forget’, *tr-jtsi* ‘pillar’, *tr-jme* ‘tail’ and *tua-jmjo* ‘dream’ correspond to Zbu *lmât*, *tltsi?*, -*lmé?* and -*lmá?*, respectively (Gong 2018: 43; 53; 288). In other cases, *j*- comes from a dissimilated coronal fricative, as in *jtsʰi* ‘give to drink’ (§17.2.2.5) and perhaps *jqu* ‘be able to lift’ (§19.3.1).

2075 The group *jmy-* in *tua-jmjo* ‘dream’ has two preinitials /*j*/ and /*m*/.

2076 The labial nasal is the ancient initial (as shown by the Zbu cognate -*lmá?*), and the nasal velar arose as a trace of proto-Gyalrong vowel velarization *-*lmaŋy* → *-*jmyo* → -*jmjo* (Jacques 2004: 44; on velarized vowels in proto-Gyalrong, see §4.2.2.5).

2077 When preceding sonorants, /*j*/ is preinitial in all cases: *jw-*, *jl-*, *jr-*, *jy-*, *jv-* and *rv-* (§4.2.2.1, §4.2.2.3, §4.2.2.4, §4.2.2.5, §4.2.2.6).

2086 4.2.1.7 Velar+C clusters

2087 Table 4.7 lists all consonant clusters with the velar fricatives /*x*/ and /*y*/ as preinitial and not ending in a non-nasal sonorant.

2088 Velar preinitials are not compatible with dorsal (velar and velar) initial consonants, but are attested with all other places of articulations. The complementary distribution between *x* (before unvoiced segments) and *y* (before voiced segments, including obstruents and nasals) is complete, and the voicing contrast can be considered to be completely neutralized in preinitial position.

2089 Comparison with Situ shows that some of these velar fricative preinitials originate from velar presyllables **kə-* (Jacques 2014b: 6). Two non-productive prefixes are sources of velar+C clusters: the animal velar prefix (§5.6.2) and the lexicalized participle *x/y-* prefix (§16.5.2). Another source of secondary velar preinitials is the intrusive *y* found as element of some derivation prefixes, including the *suy-* (§17.2.1.4) and *cuuy-* (§17.2.2.2) allomorphs of the causative, the *nuy-* allomorph of the applicative (§17.4.2), the *nvy-* allomorph of the tropative (§17.5.1) and the *sny-* allomorph of the proprietive (§18.8.1).

2090 In addition, the velar preinitial in some counted nouns like *tua-xpa* ‘one year’ is due to a *fausse coupe* (§7.3.1.7).

2104 4.2.1.8 Uvular+C clusters

2105 Table 4.8 lists all consonant clusters with the uvular fricatives /*χ*/ and /*v*/ as first element and not ending in a non-nasal sonorant. They cannot precede velars except in heterosyllabic clusters (§4.2.3.1).

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Table 4.7: List of consonant clusters with /χ/ and /ʁ/ as a first element
(23+0)

/p/	/xp/	<i>tui-xpa</i> ‘one year’
/mb/	/ymb/	<i>tui-ymba</i> ‘cheek’
/m/	/ym/	<i>tui-ymaz</i> ‘wound’
/t/	/xt/	<i>xtuit</i> ‘wild cat’
/tʰ/	/xtʰ/	<i>xtʰom</i> ‘put horizontally’
/d/	/yd/	<i>ydyso</i> ‘species of grub’
/nd/	/ynd/	<i>ynda</i> ‘ram’
/n/	/yn/	<i>ynysqi</i> ‘twenty’
/ts/	/xts/	<i>xtsṛṇa</i> ‘tip of boot’
/tsʰ/	/xtsʰ/	<i>xtsʰum</i> ‘be thin’
/s/	/xs/	<i>xsar</i> ‘goral’
/z/	/yz/	<i>yzuu</i> ‘monkey’
/tç/	/xtç/	<i>xtçi</i> ‘be small’
/tçʰ/	/xtçʰ/	<i>xtçʰut</i> ‘can contain’
/ndz/	/yndz/	<i>yndzṛβ</i> ‘fire’
/ç/	/xç/	<i>xçaj</i> ‘grass’
/z/	/yz/	<i>yzo</i> ‘bee’
/tʂ/	/xtʂ/	<i>nṛxtʂu</i> ‘bring in passing’
/ʂ/	/xʂ/	<i>xʂṛxʂṛt</i> ‘long and thin’
/c/	/xc/	<i>xcat</i> ‘be many’
/cʰ/	/xcʰ/	<i>txlṛxcʰi</i> ‘curdled milk’
/j/	/yj/	<i>yjaβ</i> ‘churn’
/ɲ/	/yŋ/	<i>w-yŋaβ</i> ‘disaster’

2108 The voicing contrast between /χ/ and /ʁ/ is only attested before sonorants: a
 2109 handful of ideophones have the cluster /χŋ/ contrasting with /ʁŋ/. Uvular preini-
 2110 tials are particularly common in Tibetan loanwords, where they correspond to
 2111 the *g-* and *d-* *sjon.* “*dzug*. The voiced fricative /ʁ/ is more often realized as an
 2112 epiglottal [ʃ] in this context.

2113 Some uvular preinitials come from the reduced allomorphs χ- and ʁ- of the
 2114 uvular animal prefix *qa-* (§5.6.1).

Table 4.8: List of consonant clusters with /χ/ and /ʁ/ as a first element
(25+0)

/p/	/χp/	χpi ‘story’
/p ^h /	/χp ^h /	taxχp ^h e ‘slap’
/b/	/ʁb/	ʁbʁbʁβ ‘thick and big’
/mb/	/ʁmb/	ʁmbum ‘be concave’
/m/	/ʁm/	ʁmaʁ ‘army’
/t/	/χt/	χtvrma ‘offerings’
/t ^h /	/χt ^h /	naxχt ^h ʁβ ‘seize the opportunity’
/d/	/ʁd/	ʁduy ‘umbrella’
/nd/	/ʁnd/	ʁndyr ‘scatter’ (anticausative)
/n/	/ʁn/	ʁnaʁna ‘both’
/ts/	/χts/	χtso ‘it is clean’
/ts ^h /	/χts ^h /	χts ^h ʁχts ^h ʁt ‘small and active’
/ndz/	/ʁndz/	ʁndzyr ‘cut’ (with scissors)
/s/	/χs/	χsyr ‘gold’
/z/	/ʁz/	ʁzʁβ ‘be careful’
/tç/	/χtç/	χtçɔŋ ‘rheumatism’
/ç/	/χç/	χçu ‘be strong’
/z/	/ʁz/	ʁzunu ‘young man’
/tʂ/	/χtʂ/	χtʂuydʐa ‘butter tea’
/ʂ/	/χʂ/	χʂʂχʂrt ‘light (clothes)’
/c/	/χc/	χcoŋkronj ‘cross-legged (sitting)’
/c ^h /	/χc ^h /	χc ^h a ‘right’
/j/	/ʁj/	ʁja ‘completely’
/ɲ/	/ʁɲ/	ʁɲiŋŋji ‘enormous’
/ɲ/	/χɲ/	χɲuχɲur ‘without energy’
	/ʁɲ/	ʁɲyŋpa ‘steward (monastery)’

2115 4.2.1.9 Nasal+C clusters

2116 The Tables 4.9 and 4.10 list all consonant clusters with a nasal consonant as preini-
 2117 tial and without medial consonant.

2118 Unlike the previous preinitials, nasals can never be directly followed by any
 2119 non-nasal sonorant: groups such as *mj-, *mw-, *mr-, *ml-, *my- and *mθ- are not
 2120 attested in onset position (they are, however, found as heterosyllabic clusters,
 2121 §4.2.3.1). This gap is due to a combination of two sound changes.

2122 First, the medials *j and *y were nasalized when preceded by a nasal, so that
 2123 *mj- and *my- became *mɲ-* (in *tu-mṇa* ‘arrow’, compare အော် *mda* ‘arrow’ from *mla,
 2124 Hill 2019: 18) and *mŋ-* (in *tu-jmŋo* ‘dream’, see §4.2.1.6), respectively.

2125 Second, *mr- became *mbr-* by epenthesis, as shown by *mbro* ‘horse’, *mbro* ‘be
 2126 high’ and *mbri* ‘cry, sing’ (in Burmese *mraih*, *mrai?* and *mraññ*, Hill 2019: 60;259).

2127 Additionally, nasal preinitials cannot be followed by any fricative. As in Ti-
 2128 betan (Li 1933), this absence is due to the conversion of post-nasal fricatives to
 2129 the corresponding affricates, as in *tu-mtsʰi* ‘liver’ (from *m-si, Burmese *asaññh*,
 2130 Hill 2019: 56).

Table 4.9: List of consonant clusters with a homorganic nasal as first element (14+1)

/p/	/mp/	<i>mpuu</i> ‘be soft’
/p ^h /	/mp ^h /	<i>mp^hul</i> ‘reproduce’
/t/	/nt/	<i>ntaqβ</i> ‘be stable’
/t ^h /	/nt ^h /	<i>nt^hyβ</i> ‘be caught between’
/ts/	/nts/	<i>ntsuu</i> ‘always’
/ts ^h /	/nts ^h /	<i>nts^hyr</i> ‘neigh’ (of horse)
/tʂ ^h /	/ntʂ ^h /	<i>ntʂ^hoz</i> ‘use’
/tʂ/	/ntʂ/	<i>ntʂu</i> ‘weed’ (vt)
/c/	/nc/	<i>ncyr</i> ‘press’
/c ^h /	/nc ^h /	<i>nc^hor</i> ‘shrink’
/k/	/ŋk/	<i>ŋke</i> ‘walk’
/k ^h /	/ŋk ^h /	<i>ŋk^hor</i> ‘arrive’
/q/	/nq/	<i>nqa</i> ‘be difficult’
/q ^h /	/nq ^h /	<i>nq^hi</i> ‘be dirty’
		<i>mpc̥</i> / <i>mpc̥yr</i> ‘be beautiful’

2131 While voiced stops and affricates with homorganic prenasalization are mono-
 2132 phonemic (§3.2.1), unaspirated and aspirated ones (Table 4.9) are better analyzed

as clusters. All places of articulation are possible, from labial (*mp^h*)- to uvular (*nq^h*)-. The special case of *mpç*- is discussed in §4.2.1.10.

Two non-homorganic prenasalized preinitials are also attested, /m-/ before all places of articulation except labials (where *m*- corresponds to the homorganic nasal preinitial), and *n*- before (voiced) labials and velars (Table 4.10). When preceded by /m/ or /n/, the contrast between plain voiced and prenasalized voiced stops and affricates is neutralized; for instance the *b* in *nb*- stands for the archiphoneme {b,mb}. In the case of the cluster *mg*-, since the prenasalized phoneme /NG/ lacks a plain voiced counterpart (§3.2.1), the only analysis possible is /MNG-/. In the orthography used in this grammar, the simplified (but non-ambiguous) transcription *mg*- is used.

The other nasal phonemes /ŋ/ and /ɳ/ are not attested as preinitials: for instance, clusters such as †*ŋp*- or †*ɳt*- are prohibited.

Some *m*- preinitials come from the nasalization of **w*- before nasal or prenasalized stops (as in the irregular causative *mno* ‘prepare’ from *no* ‘be ready’, see §17.3.1), a sound law accounting for the absence of preinitial /w/ in this context (§4.2.1.1). This sound law does not operate across syllables (§4.2.3.1), and heterosyllabic clusters with a non-nasalized coda -β followed by a nasal do exist.

Some *n*- preinitials originate from former **t*- before nasal or prenasalized stops, as in *tu-ɳya* ‘debt’ (§4.2.1.9; see also Jacques 2014b). Another source is a reduced *n*- allomorph of denominal *nu-* (as in *ngo* ‘be ill’ from the noun *tu-ɳgo* ‘disease’, §20.7.1).

4.2.1.10 Stop+ç clusters

A handful of onsets have an unvoiced stop followed by ç, including *kç*- (as in *kçilu* ‘year of the dog’ from ཁྱିଲୁ ‘year of the dog’, *pç*-, (*tupçi* ‘flax’) as well as *lpç*- (§4.2.1.3) and *mpç*- (§4.2.1.9). These clusters, found in both native vocabulary and borrowings from Tibetan, mainly originate from the combination of aspirated stops *p^h* and *k^h* with the medial -j-.

Evidence that these groups should not be synchronically analyzed as /k^hj/- and /p^hj/ underlyingly comes from two facts. First, the groups *p^hj*- and *k^hj*- are otherwise attested (§4.2.2.2). Second, the clusters (C)(p|k)ç- are not affected by partial reduplication; for instance *mpçyr* ‘be beautiful’ is reduplicated as *mpçuu~mpçyr* (see for instance 298, §21.8.3.2), not †*mp^hu~mpçyr* as would have been expected if *mpçyr* were really †/mp^hjyr/.²

²In addition, *mpçyr* ‘be beautiful’ is probably borrowed from ມັກຫ່ວຍ ‘handsome’, so that the analysis as /mp^hj/ is wrong even historically.

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Table 4.10: List of consonant clusters with a non-homorganic nasal as first element (24+0)

/t/	/mt/	<i>tx-mtu</i> ‘knot’
/t ^h /	/mt ^h /	<i>mt^huu</i> ‘spell’
/nd/	/md/	<i>mda</i> ‘arrive’ (of time)
/n/	/mn/	<i>mna</i> ‘be better’, ‘heal’
/ts/	/mts/	<i>tx-mtsui</i> ‘button’
/ts ^h /	/mts ^h /	<i>mts^hym</i> ‘hear’
/ndz/	/mdz/	<i>mdzadi</i> ‘flea’
/tç/	/mtç/	<i>mtçor</i> ‘be sharp’
/tç ^h /	/mtç ^h /	<i>tx-mtç^ho</i> ‘wedge’
/ndz/	/mdz/	<i>tua-mdzu</i> ‘tongue’
/tʂ/	/mts/	<i>mtʂyrk^hoz</i> ‘bib’
/ndz/	/mdz/	<i>mdzuiçuy</i> ‘bedbug’
/c/	/mc/	<i>txmcar</i> ‘tongs’
/c ^h /	/mc ^h /	<i>tua-mc^hi</i> ‘gall’
/ɲ/	/mɲ/	<i>tua-mja</i> ‘jaw’
/ɲ/	/mɲ/	<i>mɲym</i> ‘species of tree’
/k/	/mk/	<i>tua-mke</i> ‘neck’
/k ^h /	/mk ^h /	<i>mk^hyz</i> ‘be expert’
/ŋg/	/mg/	<i>tua-mga</i> ‘advantage’
/ŋ/	/mŋ/	<i>mŋym</i> ‘hurt’
/NG/	/mg/	<i>tamgom</i> ‘clamp’
/mb/	/nb/	<i>anbaš</i> ‘hide’
/m/	/nm/	<i>tx-nmaš</i> ‘husband’
/ŋg/	/ng/	<i>ngut</i> ‘be strong’, ‘be resistant’
/ŋ/	/nŋ/	<i>nŋo</i> ‘lose’

4.2.2 Medials

This section deals with consonant clusters whose last consonant is one of the six non-nasal sonorants (/r/, /l/, /j/, /w/, /y/ or /ɥ/). These sonorants can either be medials (§4.1) or initials, depending on whether they are deleted when the cluster is partially reduplicated. They are always medials when the preceding consonant is not one of the possible preinitials (§4.2.1). Clusters ending in a non-nasal sonorant whose penultimate element is a possible preinitial (sibilant/alveolo-palatal fricative or non-nasal sonorant)³ are referred to as *ambiguous clusters*, as they need to be systematically tested with partial reduplication to determine the phonological status of the final sonorant (initial or medial).

The secondary clusters with medial glides created by the effect of synizesis (§3.3.1.3) with the 1SG suffix -a (§14.2.1.1) are not included in the listing below, even though what is transcribed as *Ce|i-a* and *Co|u-a* in the orthography is homophonous with *Cja* and *Cwa*, respectively. Including them would have the effect of introducing an enormous number of secondary and predictable clusters. In addition, synizesis of *Cu-a* generates the [ɥ] allomorph of /ui/, constituting a seventh glide not found in the vocabulary.

4.2.2.1 C+/w/ clusters

Table 4.11 lists all clusters ending in /w/. Clusters of this type are very rare, as a combination of two sound changes have removed all instances of proto-Gyalrong *Cw. First, the labiovelars, still preserved in Zbu, have merged with plain velars (for instance *nuŋa* ‘cow’, Zbu ɳwéʔ, Gong 2018: 40), and the remaining instances of *w have become y (as in *tuu-ցya* ‘tooth’ from *-ցwa, §4.2.2.5).

There are no clusters with labial consonants followed by w, but there is a triple contrast between *hw-*, *χw-* and *xw-*: it is the only context where minimal pairs between the glottal /h/, the uvular /χ/ and the velar /x/ unvoiced fricatives can be found.

The combination of cluster-final /w/ with the rhyme -a is homophonous with the result of synizesis of the 1SG -a with verb stems in -o and -u; for instance, the 1SG possessive *a-rwa* ‘my tent’ is not distinguishable from *aro-a* ‘I own’ (§3.3.1.3). Both are phonetically realized as [arwa].

Clusters in w are mainly found in ideophones and Chinese loanwords (including nativized ones such as *kwitsut* ‘cupboard’ from 柜子 <guizi> ‘cupboard’

³Nasal sonorants cannot directly precede non-nasal sonorants in syllable onset position, due to a series of sound changes (§4.2.1.9), so they are not possible preinitials when the initial is a non-nasal sonorant.

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Table 4.11: List of consonant clusters ending in /w/ (10+0)

/d/	/dw/	<i>dwayndway</i> ‘out of his head’
/z/	/zw/	<i>zwyr</i> ‘mugwort’
/l/	/lw/	<i>lwyz</i> ‘become sick again’
/r/	/rw/	<i>rwa</i> ‘yak felt tent’
/ʂ/	/ʂw/	<i>ayuswaj</i> ‘correspond well’
/j/	/jw/	<i>jwajwa</i> ‘very thin’
/k/	/kw/	<i>kwitsut</i> ‘cupboard’
/x/	/xw/	<i>xwyrnxxwyr</i> ‘rotating quickly’
/χ/	/χw/	<i>χwyr</i> ‘Hor’ (place name)
/h/	/hw/	<i>hwyrhwyr</i> ‘wide-mouthed’

with a mysterious coda *-t*). The only native clusters with *w* as final element are *jw-* (as in *tx-jwax* ‘leaf’) and *zw-* (*zwyr* ‘mugwort’), where the *w* comes from the lenition of a voiced labial stop (Jacques 2004: 325–329).

In ambiguous clusters, cluster-final *-w* is a medial consonant in /zw/ and /lw/, as shown by the distributed action derivation (§19.4) *nr-zuu~zwyr* ‘burn everywhere’ and *nr-lu~lwox* ‘spill everywhere’ from *zwyr* ‘burn’ and *lwox* ‘spill’ (not \dagger *nr-zwu~zwyr* or \dagger *nr-lwu~lwox*).

In *jw*, the labial glide is initial, as it is not deleted in reduplication, for example in the comitative adverb *kÿ-jwu~jwax* ‘together with (its) leaves’ (§5.8.1) from *tx-jwax* ‘leaf’.

The cluster *rw* is intriguing, as it presents two alternative reduplication patterns. The labial glide is treated as initial in the distributed action derivation *nr-rwu~rwyt* ‘dig everywhere’ from *rwyt* ‘dig’ (not \dagger *nr-ru~rwyt*), but in the comitative derivation, *rwa* ‘yak felt tent’ can either be reduplicated as *kÿ-ru~rwa* or *kÿ-rwu~rwa* ‘together with the felt tent’.

4.2.2.2 C+/j/ clusters

Tables 4.12 and 4.13 list all clusters ending in /j/. This glide can follow consonants of all places of articulation except palatals, alveolo-palatals and retroflex consonants (other than /r/). In the orthographical system used in this grammar and previous publications on Japhug, /j/ is transcribed as <j> after /v/, /y/, labial consonants and dental fricatives, and as <i> after velar and uvular stops, as well as dental stops and affricates and /l/.

Table 4.12: List of biconsonant clusters ending in /j/ (20)

/p/	/pj/	<i>pjalu</i> ‘year of the cock’
/b/	/bj/	<i>bjubbjuy</i> ‘hanging in great number’
/mb/	/mbj/	<i>mbjom</i> ‘be fast’
/w/	/wj/	<i>tçʰiβja</i> ‘duck’
/d/	/dj/	<i>dioðdios</i> ‘evenly mixed’
/nd/	/ndj/	<i>ndivndirt</i> ‘gracious’
/ts/	/tsj/	<i>tsianjnytsiaj</i> ‘very tall, moving’
/ndz/	/ndzj/	<i>ndziaš</i> ‘be tight’ (knot)
/s/	/sj/	<i>sjajnysjaj</i> ‘shaking one’s head’
/z/	/zj/	<i>zjazjzaj</i> ‘big’
/l/	/lj/	<i>qalias</i> ‘eagle’
/r/	/rj/	<i>tu-rju</i> ‘word’
/k/	/kj/	<i>kio</i> ‘caused to glide’
/kʰ/	/kʰj/	<i>kʰukʰju</i> ‘oval’
/ŋg/	/ŋgj/	<i>ŋgio</i> ‘slip’, ‘glide’
/ɣ/	/ɣj/	<i>tu-ɣyrn</i> ‘one time’
/q/	/qj/	<i>qiaβ</i> ‘be bitter’
/qʰ/	/qʰj/	<i>qʰiuqʰiu</i> ‘blunt (colour)’
/NG/	/NGj/	<i>ngia</i> ‘come loose’
/ɣ/	/ɣj/	<i>ɣit</i> ‘think of’, ‘miss’, ‘remember’

2222 In ambiguous clusters, cluster-final /j/ is medial when following /r/, /l/ and
 2223 /s/ (/rj-/, /lj-/ and /sj-/), and initial when preceded by /w/, /ɣ/ and /v/ (/wj-/,
 2224 /ɣj-/ and /vj-/).

2225 There is in addition a highly unstable cluster *zj-* when the alveolo-palatal allo-
 2226 morph of the translocative prefix (§15.2.1.2) precedes the ‘unspecified’ orientation
 2227 preverbs. As in the case of the other palatal preverbs, the dissimilated dental allo-
 2228 morph *z-* is more commonly found (§4.2.1.5, §15.2.1.2). There is no example with
 2229 *zj-* in the corpus, and all instances of this cluster come from elicitation of verb
 2230 forms with the translocative.

2231 Clusters with velar stops+/j/ and dental affricates+/j/ are clearly distinctive
 2232 with palatal stops (*kio* ‘cause to glide’ vs. *co* ‘valley’, cf. Table 3.2.1, §3.3) and
 2233 alveolo-palatal affricates (*ndziaš* ‘be tight’ (of knot), ‘be deep’ (of colour), ‘be
 2234 completed’ vs. *ndžaš* ‘swim’). There are no perfect minimal pairs between alveolo-
 2235 palatal affricates and dental stop+/j/ clusters, as they are very rare and restricted
 2236 to a handful of ideophones, but quasi-minimal pairs such as *ndivndirt* ‘gracious’

4 Consonant clusters and partial reduplication

and *ndz̥yβ* ‘be burned’ (§18.5.1) suffice to establish the reality of this phonological contrast.

Aspirated velar and labial stops followed by /j/ are rare, since pre-Japhug **kʰj-* and **pʰj-* have changed to *kč-* and *pč-*, respectively (§4.2.1.10). This sound change, however, did not affect the cluster *spʰj-* (Table 4.13), and new instances of /kʰj-/ have been created from interjections.

The combination of cluster-final /j/ with the rhyme -*a* is homophonous with the result of synizesis of the 1SG -*a* with verb stems in -*e* and -*i*.

Table 4.13: List of triconsonantal clusters ending in /j/ (18)

/wsj/	<i>tr-fsjit</i> ‘whistle’
/wzj/	<i>βzjoz</i> ‘learns’
/spj/	<i>spjarkuu</i> ‘wolf’
/spʰj/	<i>spʰjar</i> ‘spread out to dry’
/stj/	<i>stiagnystianj</i> ‘jumping’
/sqʰj/	<i>sqʰiar</i> ‘stretches’
/ltʰj/	<i>ltʰiryltʰirt</i> ‘well-ironed (clothes)’
/lbj/	<i>lbjulbjuy</i> ‘hanging’
/spj/	<i>rpiu</i> ‘spoil’ (milk)
/rmbj/	<i>tr-rmbja</i> ‘flash of lightning’
/stsj/	<i>rtsiaz</i> ‘be steep’ (road)
/sqʰj/	<i>tr-rqʰioz</i> ‘groove’
/RNGj/	<i>aryRN晁ioz</i> ‘be grooved’
/χtsj/	<i>χtsiu</i> ‘pint’
/χpj/	<i>χpjṛt</i> ‘observe’
/χsj/	<i>u-χsjuβ</i> ‘slough’
/mpj/	<i>mpja</i> ‘be warm’
/mtsj/	<i>tr-mtsioz</i> ‘beak’
/nqj/	<i>nqiaβ</i> ‘dark side of the mountain’

In triconsonantal groups, /j/ can co-occur with all preinitials except velar and alveolo-palatal fricatives and itself (Table 4.13).

A group *cpj-* with alveolo-palatal preinitial does exist, but it is not completely stable. It only occurs when the *c-* allomorph of the translocative prefix (§15.2.1.2) precedes the B-type *pjuu-* or the D-type *pjṛ-* DOWNWARDS preverbs (§15.1.1.1), as in examples such as (117) (§8.2.4.2). It is in free variation with *spj-* in this context, as the translocative has another *s-* allomorph when preceding *pj-* and *cʰ-* (§15.2.1.2).

2252 For instance in (3) we find *s-pjuu-lxt-nuu* instead of *c-pjuu-lxt-nuu* (the more common
2253 form).

- 2254 (3) *tusqar tu-ndo-nuu tce, qrormbuu nuu-car-nuu tce nure*
 tsampa IPFV-IPFV-take-PL LNK anthill IPFV-look.for-PL LNK DEM:LOC
 2255 *s-pjuu-lxt-nuu ηgrvl.*
 TRAL-IPFV:DOWN-release-PL be.usually.the.case:FACT
 2256 '(Faithful Buddhist people) take tsampa_i, look for an anthill_j and spill it_i
 2257 there_j.' (26-qro, 74)

2258 4.2.2.3 C+/l/ clusters

2259 Tables 4.14 and 4.15 list all clusters ending in /l/. The lateral sonorant cannot
2260 follow retroflex affricates, dental stops and alveolo-palatal affricates.

Table 4.14: List of biconsonant clusters ending in /l/ (18)

/p/	/pl/	<i>plut</i> ‘destroy’
/mb/	/mbl/	<i>mblut</i> ‘be destroyed’
/w/	/wl/	<i>βluu</i> ‘burn’
/ts/	/tsl/	<i>tsluytshuy</i> ‘completely wrapped up’
/s/	/sl/	<i>sloꝝ</i> ‘dig’ (with snout)
/z/	/zl/	<i>tuu-zloꝝ</i> ‘one time’
/č/	/čl/	<i>člu</i> ‘plough’
/ž/	/žl/	<i>ž-lo-ru</i> ‘s/he went and looked upstream’
/r/	/rl/	<i>rlaꝝ</i> ‘disappear’
/c/	/cl/	<i>clayclay</i> ‘round and smooth’
/j/	/jl/	<i>jla</i> ‘hybrid yak’
/k/	/kl/	<i>klukluu</i> ‘stiff’
/g/	/gl/	<i>glyglyn</i> ‘pressed’
/ŋ/	/ŋgl/	<i>cunghuy</i> ‘pestle’
/ɣ/	/ɣl/	<i>yle</i> ‘knead’, ‘rub’
/q/	/ql/	<i>qlut</i> ‘break’ (vt)
/qʰ/	/qʰl/	<i>qʰluu</i> ‘naga’
/NG/	/NGl/	<i>nglut</i> ‘break’ (vi)
/β/	/βl/	<i>tuu-βla</i> ‘forearm’

2261 The cluster *zl-* is only attested when the translocative prefix occurs before
2262 UPSTREAM preverbs (§15.2.1.2).

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2263 In the clusters with the fricative /s/ or a sonorant as first element (/sl/, /wl/,
 2264 /jl/, /rl/, /yl/ and /bl/), /l/ is initial. For instance, the distributed action derivation
 2265 (§19.4) of *sloꝝ* ‘dig’ and *yle* ‘rub’ are *nꝝ-lsru~sloꝝ* ‘dig everywhere with snout’
 2266 *nꝝ-ylu~yle* ‘rub again and again’ (not †*nꝝ-su~sloꝝ* and †*nꝝ-yu~yle*), and the
 2267 comitative adverb (§5.8.1) from *jla* ‘male hybrid yak’ is *kꝝ-jlu~jla* ‘together with
 2268 his/her/their hybrid yak(s)’ (not †*kꝝ-ju~jla*).

2269 On the other hand, /l/ is medial in /cl/, as shown by the fact that the verb
 2270 *clu* ‘plough’ has the distributed action derivation *nꝝ-ցu~clu* ‘plough everywhere’
 2271 (not †*nꝝ-ցu~ցl* as would have been expected if /l/ were initial).⁴ The groups
 2272 /zl/ and /z̥l/ are not found in words that can be subjected to partial reduplication,
 2273 and their status is undecidable at the present moment.

Table 4.15: List of triconsonantal clusters ending in /l/ (12)

/scl/	<i>sclay̚sclaj</i> ‘bald’
/sql/	<i>sqlum</i> ‘collapse’
/sqʰl/	<i>asqʰlu</i> ‘be concave’
/çpl/	<i>çploꝝçploꝝ</i> ‘round and smooth’
/çkl/	<i>çklickli</i> ‘round and stiff’
/çql/	<i>çqluβnꝝçqluβ</i> ‘walking in the water’
/çqʰl/	<i>çqʰlxt</i> ‘disappear’
/rngl/	<i>arnghlum</i> ‘be caved in’
/χpl/	<i>χploꝝχploꝝ</i> ‘round like a ball’
/vŋl/	<i>vŋliŋŋli</i> ‘big and tall’
/mql/	<i>mqlas</i> ‘swallow’
/mgl/	<i>tua-mgla</i> ‘one step’

2274 In triconsonantal clusters (Table 4.15), the medial /l/ co-occurs with dental,
 2275 alveolo-palatal and uvular fricatives, as well as /r/ and /m/. The only word with
 2276 a preinitial /r/ and a medial /l, *arnghlum* ‘be caved in’, derives from *sqlum* ‘collapse’
 2277 by prenasalization alternation (§19.7.9): the *r-* originates here from rhotacism of
 2278 *s-* (through **z*).

2279 4.2.2.4 C+/r/ clusters

2280 The Tables 4.16, 4.17 and 4.18 list all clusters ending in /r/. The rhotic sonorant
 2281 can follow all places of articulations except retroflex fricatives and affricates.

⁴In Jacques (2004: 25:59), I claimed that /cl/ could be reduplicated either with or without deletion of /l/, but I have not been able to confirm my earlier data and it may have been an error.

Table 4.16: List of consonant clusters with two elements ending in /r/ (26)

/p/	/pr/	<i>pri</i> ‘bear’
/p ^h /	/p ^h r/	<i>k^hyp^hru</i> ‘spraying water with the mouth’
/b/	/br/	<i>brubruz</i> ‘having pimples’
/mb/	/mbr/	<i>mbr^ht</i> ‘break’ (vi)
/w/	/wr/	<i>βraꝝ</i> ‘attach’
/d/	/dr/	<i>droydroj</i> ‘big and dirty’
/ts/	/tsr/	<i>tsri</i> ‘be salty’
/ndz/	/ndzr/	<i>ndzri</i> ‘wring’
/s/	/sr/	<i>srun</i> ‘cotton’
/z/	/zr/	<i>zru</i> ‘sunny side of the mountain’
/tç/	/tçr/	<i>tçruynytçruy</i> ‘crunching’
/ç/	/çr/	<i>çri</i> ‘leak’
/z/	/zr/	<i>zru</i> ‘be strong’
/c/	/cr/	<i>cruycruy</i> ‘in a mess’
/c ^h /	/c ^h r/	<i>c^hryβc^hryβ</i> ‘messy and dirty’
/j/	/jr/	<i>jruyjruy</i> ‘gurgling’
/j/	/jr/	<i>tr-jroꝝ</i> ‘trace’
/k/	/kr/	<i>kry</i> ‘cut’, ‘shear’, ‘mow’
/k ^h /	/k ^h r/	<i>k^hro</i> ‘much’
/g/	/gr/	<i>gruβgruβ</i> ‘matsutake’
/ŋg/	/ŋgr/	<i>ŋgr^hl</i> ‘be usually the case’
/ɣ/	/yr/	<i>yro</i> ‘suffocate’
/q/	/qr/	<i>qro</i> ‘pigeon’
/NG/	/NGr/	<i>NGraꝝ</i> ‘be torn’
/β/	/βr/	<i>βru lu</i> ‘without horns’

4 Consonant clusters and partial reduplication

In the ambiguous clusters with a sonorant as first element (/wr/, /jr/, /yr/ and /br/), /r/ is initial, as shown by the perative *w-jruu~jroꝝ* ‘following X’s trace’ (§5.8.2), the emphatic participle *kui-wyruu~wyrum* ‘very white (one)’ (98, §5.5.1.2) and the reciprocal *a-zjyv̥ruu~zre* ‘respect each other’ from *zjyv̥re* ‘respect’.

By contrast, in ambiguous clusters with a coronal fricative as first element (/sr/, /zr/, /cr/, /zr/), /r/ is medial, as illustrated by the emphatic participles *kui-zuu~zri* ‘very long (one)’ (in 100, §23.5.10.1), *kui-zuu~zru* ‘very strong (one)’ and *kui-yryχsuu~χsruu* ‘very handsome (one)’ (4).⁵ Tshendzin rejects reduplication of these clusters without deletion: †*kui-zruu~zri* and †*kui-zruu~zru* are not grammatical.

- (4) *bzumuu kui-zuu~zru zo kui-yryχsuu~χsruu zo*
 young.man SBJ:PCP-EMPH~strong EMPH SBJ:PCP-EMPH~handsome EMPH
jx-k-χβzu-ci
 IFR-PEG-become-PEG
 ‘(The fox) became a strong and handsome young man.’ (2012 qachGa, 187)

The /w/ preinitial in the group *wyr-* is not realized as a sepearte segment (§4.2.1.1); it turns preceding back unrounded vowels /u/ and /y/ into their rounded counterparts. For instance, *kui-wyruu~wyrum* ‘very white (one)’ is pronounced [kuyruyrum].

An extra-short *svarabhakti* vowel can be heard in some clusters with -r- medial, in particular after coronal affricates and dorsal stops. For instance, *cʰr-kro* ‘s/he distributed it’ can be realized as [cʰy̯kero].

The retroflex affricates originate at least in part from clusters of dental stops followed by *r*; direct evidence for the sound change **tr-* → *tʂ-* comes from alternations between /tʂ/ and /r/, as that between the numeral *kuitʂy* ‘six’ and *sqapryy* ‘sixteen’ (§7.1.3) and between *tʂu* ‘path’ and *ftčerru* ‘path in the middle of the fields’ is a compound of *ftčar* ‘summer’ and *tʂu* ‘path’ (§5.4.3.2). The gap in the system caused by this sound change has been filled by some ideophones in *dr-* (§10.1.5.1); the only non-ideophone with a cluster of this type is *qumdroy* ‘crane’, whose onset can either be analyzed as /dr/ or as /ndr/, as the contrast between /d/ and /nd/ is neutralized due to assimilation with the /m/ coda of the preceding syllable.

In triconsonantal clusters (Tables 4.17 and 4.18), the medial /r/ is compatible with all preinitials except itself.

⁵Reduplication of the simple /sr/ cluster in the comitative adverb *kχ̥-suu~srun* ‘together with (its) cotton wool’ (§5.8.1) confirms that /r/ is medial in /sr/, not only in /χsr/.

Table 4.17: List of consonant clusters with three elements ending in /r/ with a non-nasal preinitial (32)

/wkr/	<i>fkruez</i> ‘be greedy’
/wyr/	<i>wyrum</i> ‘be white’
/wsr/	<i>fsraj</i> ‘he protects’
/spr/	<i>spruskuu</i> ‘reincarnated’
/zbr/	<i>zbrilu</i> ‘year of the snake’
/zmbr/	<i>sxzmbbru</i> ‘make angry’
/st ^h r/	<i>st^hruuβ</i> ‘dangling (of snot)’
/scr/	<i>scrakscrak</i> ‘very small’
/zjr/	<i>zrjanzrjan</i> ‘soft and bloated’
/skr/	<i>skraskra</i> ‘impolite’
/sk ^h r/	<i>tuu-sk^hruu</i> ‘body’
/zgr/	<i>zgrawa</i> ‘leather sack’
/sqr/	<i>srsqra</i> ‘limit’
/çpr/	<i>açprum</i> ‘be badly sewed’
/zmbr/	<i>zmbri</i> ‘willow’
/ctr/	<i>ctranjctranj</i> ‘long and soft’
/zdr/	<i>zdranjzdranj</i> ‘long and soft’
/çkr/	<i>çkryz</i> ‘oak’
/zgr/	<i>zgruy</i> ‘certainly’
/zŋgr/	<i>zŋgri</i> ‘star’
/çqr/	<i>çqras</i> ‘be intelligent’
/zNGR/	<i>zNGro</i> ‘Jew’s harp’
/jkr/	<i>jkrut</i> ‘congeal’
/jtsr/	<i>jtsraβ</i> ‘delay departure’
/xpr/	<i>yrrxpra</i> ‘dispatch’
/χpr/	<i>tç^hwχpri</i> ‘newt’
/vembr/	<i>taembrä</i> ‘jump’ (of horse)
/χsr/	<i>yrrχsruu</i> ‘be handsome’
/vzr/	<i>vzrajvzraj</i> ‘dishevelled’
/χcr/	<i>χcuχcri</i> ‘thin, diluted’
/vjr/	<i>vjuvjri</i> ‘fat and soft’
/vgr/	<i>vgra</i> ‘enemy’

Table 4.18: List of consonant clusters with three elements ending in /r/ with a nasal preinitial (9)

/ŋcr/	<i>ncuŋcri</i> ‘thin, diluted’
/ŋkʰr/	<i>ŋkʰruли</i> ‘screw’
/ngr/	<i>ngruβ</i> ‘accomplish’
/nqr/	<i>u-nqra</i> ‘shabby’
/mtrs/	<i>mumtsruy</i> ‘drink with a straw’
/mpʰr/	<i>mpʰrumuu</i> ‘divination’
/mkʰr/	<i>mkʰroj</i> ‘be reincarnated’
/mgr/	<i>mgrun</i> ‘treat’, ‘invite’
/nbr/	<i>nbraʒ</i> ‘hoe’ (vt)

2313 4.2.2.5 C+/γ/ clusters

2314 The Tables 4.19 and 4.20 list all clusters ending in /γ/. The velar fricative can
 2315 follow all place of articulations except retroflex affricates, velars and uvulars.

2316 In ambiguous clusters, the /γ/ is initial in /zγ/ and when preceded by a non-
 2317 nasal sonorant (/wγ/, /jγ/, /lγ/ and /rγ/), as illustrated by the distributed action
 2318 derivation (§19.4) *nṛ-lyu~lyā* ‘dig everywhere’ from *lyā* ‘dig’ (not †*nṛ-hu~lyā*).
 2319

2320 The velar sonorant is medial in /cγ/, as shown by the comitative adverb (§5.8.1)
 2321 *kṛ-çuu~çya* ‘together with its teeth’ (not †*kṛ-çyu~çya*) from *tu-çya* ‘tooth’.⁶ The
 2322 group /zγ/ cannot be tested with partial reduplication.

2323 Cluster-final γ is secondary, and has at least three origins. First, it comes from
 2324 proto-Gyalrong medial *-w-, as in *lyā* ‘dig’ (Situ *rwā*, Huáng & Sūn 2002) or *tu-tya*
 2325 ‘one span’ (Situ *ta-təwá*; the Tibetan cognate མྚ ཡ བ ‘span’ underwent Laufer’s
 2326 law, Jacques 2009; Hill 2011b). Most *-w- medials in the inherited vocabulary have
 2327 undergone this sound change (except after dorsals, where they have disappeared),
 2328 and the present w medials are secondary (§4.2.2.1).

2329 Second, it originates from the lenition of velar stops in clusters with two stops
 2330 in proto-Gyalrong, as in *pja* ‘bird’ (from *pk-, see Cogtse Situ *pká*, Huáng & Sūn
 2002).

2331 Third, it is a secondary trace of velarized vowels (Jacques 2004: 231), as in
 2332 *trjpyom* ‘ice’ (from *tv-lpa'j, see Zbu *talvám?*, Gong 2018: 13).

2333 In triconsonantal clusters (Table 4.20), medial γ can occur with all preinitials
 2334 except velar fricatives and the labial w- and m-, a further clue of its diachronic

⁶In Jacques (2004: 59), I claimed that /cγ/ could be reduplicated either with or without deletion of /γ/, but in my more recent data only the variant with deletion is attested.

Table 4.19: List of consonant clusters with two elements ending in /y/ (25)

/p/	/py/	<i>pya</i> ‘bird’
/p ^h /	/p ^h y/	<i>p^hyo</i> ‘flee’
/b/	/by/	<i>subyi</i> ‘species of bush’
/mb/	/mb ^h y/	<i>mbya^hya</i> ‘turn over’ (vi)
/w/	/wy/	<i>βya</i> ‘mill’
/t/	/ty/	<i>tu-tya</i> ‘one span’
/t ^h /	/t ^h y/	<i>t^hye</i> ‘acorn’
/d/	/dy/	<i>dy^hrdy^hr</i> ‘dumb’
/nd/	/ndy/	<i>ndy^hndy^ht</i> ‘shaking’
/ts/	/tsy/	<i>tsyi</i> ‘rot’
/ndz/	/ndzy/	<i>tuu-ndzyi</i> ‘fang’
/s/	/sy/	<i>sya</i> ‘rust’
/z/	/zy/	<i>zyut</i> ‘reach’
/l/	/ly/	<i>lya</i> ‘dig’
/tç/	/tçy/	<i>tçya^hya</i> ‘squeeze out’
/tç ^h /	/tç ^h y/	<i>tç^hya^htç^hya^hya</i> ‘completely’
/ndz/	/ndzy/	<i>ndzya^hya</i> ‘be squeezed out’
/ç/	/çy/	<i>tuu-çya</i> ‘tooth’
/z/	/zy/	<i>zy^h-</i> reflexive prefix
/r/	/ry/	<i>tuu-ryi</i> ‘seed’
/ʂ/	/ʂy/	<i>ʂy^hʂy^hʂ</i> ‘transparent and round’
/ç ^h /	/ç ^h y/	<i>qac^hya</i> ‘fox’
/ɲ/	/ɲy/	<i>ɲy^hɲy^hɲy^hya</i> ‘plump and huge’
/j/	/jy/	<i>jy^hyt</i> ‘come back’

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Table 4.20: List of consonant clusters with three elements ending in /γ/ (21)

/spγ/	<i>spyi</i> ‘storehouse’
/zby/	<i>trkγzbyas</i> ‘headache’
/sty/	<i>styrrnystyrr</i> ‘jumping’
/lcʰγ/	<i>lcʰγaslcʰγas</i> ‘nice to wear’
/ldzy/	<i>stołdzyżym</i> ‘straw from broad beans’
/cɒγ/	<i>cɒyo</i> ‘unit of measure’
/cpʰγ/	<i>cpʰyo</i> ‘flee with’
/jmby/	<i>nxjmbyom</i> ‘have vertigo’
/jpγ/	<i>jpyom</i> ‘freeze’
/jndy/	<i>nujndyo</i> ‘echo’ (vi)
/rmby/	<i>tr-rmbyo</i> ‘drum’
/rpγ/	<i>rpyo</i> ‘up on the mountain’
/rpʰγ/	<i>w-rpʰγxt</i> ‘upper door frame’
/χpγ/	<i>tui-χpysi</i> ‘thigh’
/kmbγ/	<i>ɛmbyi</i> ‘sun’
/mpʰγ/	<i>mpʰγasmpʰγas</i> ‘very tight’
/ntçʰγ/	<i>ntçʰγas</i> ‘splash’
/ntʰγ/	<i>antʰyar</i> ‘bounce’
/ntsγ/	<i>ntsye</i> ‘sell’
/ntsʰγ/	<i>nʂntsʰγsz</i> ‘bump into’
/ncγ/	<i>ncγyŋcγyt</i> ‘many people, very noisy’
/jcʰγ/	<i>ŋcʰγas</i> ‘birchbark’

²³³⁵ origin from *w. Combinations /-w.Cγ-/ are possible, however, in heterosyllabic
²³³⁶ clusters (§4.2.3.1), as in the noun *laβzyi* ‘steamed turnip’.

4.2.2.6 C+/k/ clusters

²³³⁸ Clusters with k as last element are listed in Table 4.21. The uvular fricative is me-
²³³⁹ dial only in a handful of clusters with dental or alveolo-palatal affricates, where it
²³⁴⁰ contrasts with γ, as shown by the minimal pair *tui-ndzsi* ‘collar bone’ vs. *tui-ndzi*
²³⁴¹ ‘fang’.

²³⁴² In ambiguous clusters, with the dental fricative /zβ/ and non-nasal sonorants
²³⁴³ (/wβ/, /lβ/, /rβ/ and /jβ/), /β/ is always initial, as illustrated by *ryββu~ββu*

Table 4.21: List of consonant clusters ending in /ʂ/ (8)

/w/	/wʂ/	<i>β̥sa</i> ‘prevail’
/ndz/	/ndzʂ/	<i>tui-ndzsi</i> ‘collar bone’
/z/	/zʂ/	<i>zʂyŋciu</i> ‘sling’
/l/	/lʂ/	<i>l̥sa</i> ‘gunny bag’
/tʂ/	/tʂʂ/	<i>tʂnuznystʂnuz</i> ‘crunchy’
/tʂʰ/	/tʂʰʂ/	<i>tʂʰnuznystʂʰnuz</i> ‘crunchy’
/r/	/rʂ/	<i>r̥nom</i> ‘be rough’
/j/	/jʂ/	<i>ajʂu</i> ‘be bowed’ (of legs, trees etc)

from *r̥β̥sa* ‘roar’, *kui-ʂruu~r̥nom* ‘very rough (one)’ from *r̥nom* ‘be rough’ and *kui-ʂjuu~jʂu* ‘very bent (one)’ from *ajʂu* ‘be bent’.

One of the origins of cluster-final ʂ is the result of the lenition of the uvular stop *q in double stop clusters, as in *β̥sa* ‘prevail’ (from *pq-, Jacques 2004: 330, as shown by the Situ cognate *pkâ*, Huang & Sun 2002: 603).

4.2.3 Summary

Table 4.22 summarizes the numbers of clusters identified in §4.2.1 and §4.2.2. Since in ambiguous clusters (§4.2.2) partial reduplication is not always available to determine whether the final non-nasal sonorant is medial or initial, no attempt is made at distinguishing between [initial+medial] and [preinitial+initial] clusters in this table.

Clusters with four elements can appear at least at the phonetic level if the last syllable of a verb stem with a triconsonantal onset undergoes synizesis with the 1SG -a suffix (§3.3.1.3). The denominal verb *yʂjmo* ‘dream of’ (§20.5.2) from the noun *tui-jm̥o* ‘dream’ (§4.2.1.6) provides examples like *pj̥-w̥-yʂ-jm̥o-a* (IFR-INV-DENOM-dream-1SG) ‘s/he dreamed of me’ realized as [pjó.ye.jm̥wa] with a complex onset [jm̥w] comprising four segments.

Attested ambiguous clusters are listed in Table 4.23. Grey shading indicates phonotactically impossible combinations, due in particular to the constraints against the combination of velars and uvulars (§4.2.2.5, §4.2.2.6), and against the combination of alveolo-palatals with /j/ (§4.2.1.6, §4.2.2.2). Orange colour indicates [initial+medial] clusters, whose final sonorant is removed in partial reduplication. Blue colour marks [preinitial+initial] clusters, whose final sonorant is unaffected by reduplication. Clusters left in white are those for which partial

4 Consonant clusters and partial reduplication

Table 4.22: Count of consonant clusters

type	CC	CCC	total
wC	15	8	23
s/zC	23	0	23
lC	17	1	18
ʂ/rC	35	0	35
jC	13	1	14
ç/zC	20	0	20
x/yC	23	0	23
χ/βC	25	0	25
NC	14	1	15
m/nC	25	0	25
Cç	2		2
Cw	10	0	10
Cj	20	19	39
Cl	19	12	31
Cr	25	41	66
Cy	25	21	46
Cβ	8	0	8
total	319	104	423

2368 reduplication cannot be tested. The cluster *rw* has two possible reduplication
 2369 patterns (§4.2.2.1) and is thus left unmarked.

2370 Even though some of the clusters cannot be subjected to testing with partial
 2371 reduplication, the data in Table 4.23 suggest the following rules:

- 2372 • If the first element of the ambiguous cluster is an alveolo-palatal fricative
 2373 (/ç/, /ʐ/), the following sonorant is *medial*.
- 2374 • If the first element of the ambiguous cluster is a glide (/w/, /j/) or a dorsal
 2375 sonorant (/y/, /β/), the following sonorant is *initial*.
- 2376 • If the first element of the ambiguous cluster is a dental fricative (/s/, /z/),
 2377 the rhotic /r/ or the lateral /l/, the following sonorant is *medial* if it is a
 2378 glide or /l/, and it is *initial* if it is the rhotic or a dorsal sonorant.

Table 4.23: Ambiguous clusters

	/w/	/j/	/r/	/l/	/ɣ/	/β/
/ç/			/çr/	/çl/	/çɣ/	/çβ/
/z/			/zr/	/zl/	/zɣ/	
/s/		/sj/	/sr/	/sl/	/sy/	
/z/	/zw/	/zj/	/zr/	/zl/	/zɣ/	/zβ/
/l/	/lw/	/lj/			/ly/	/lb/
/r/	/rw/	/rj/		/rl/	/ry/	/rb/
/w/		/wj/	/wr/	/wl/	/wy/	/wb/
/j/		/jw/	/jr/	/jl/	/jy/	/jb/
/ɣ/		/ɣj/	/ɣr/	/ɣl/		
/β/		/βj/	/βr/	/βl/		

2379 4.2.3.1 Heterosyllabic clusters

2380 In addition to the clusters attested in onset position described in this chapter,
 2381 another type of consonant clusters is found whenever a closed syllable is in non-
 2382 final position in the word. These heterosyllabic clusters, whose first element is
 2383 the coda of the first syllable, present considerably fewer phonotactic constraints
 2384 than onset clusters.

2385 The most obvious difference is the fact that, while a strict prohibition against
 2386 having the same segment as preinitial and a medial is observed in onset clusters,
 2387 this constraint does not apply in heterosyllabic ones. For instance, the noun *tçʰyr-*
 2388 *pruu* ‘rain shelter’, a compound from Tibetan བྱର བྱର ‘rain’ and the native word
 2389 *typruu* ‘rain shelter’, has the sequence *-r.pr-*, which would be completely impossi-
 2390 ble as syllable onset (§3.4.1).

2391 The phoneme /w/, realized as -β in coda position (§3.2.2), does not become
 2392 an unvoiced fricative when followed by an unvoiced obstruent in the next syllable,
 2393 as in the noun *slyβkʰaj* ‘school’, which is not realized as †*slyfkʰaj* as would
 2394 have been expected if the /w/ were in preinitial position (§4.2.1.1). The coda -β
 2395 is generally deleted when it precedes labial stops, especially the voiced /b/ in
 2396 ideophones. For instance, the pattern II ideophone (§10.1.2.2) from the root |*bɣβ*|
 2397 is *bɣbɣβ* ‘stubborn, bulky’; the alternative realization *bɣβbɣβ* is also possible.

2398 Unlike /w/ in preinitial position (§4.2.1.9), the coda -β does not assimilate with
 2399 nasals or prenasalized onsets that follow it. For instance, the coda -β in the last
 2400 syllable of verb stems is not nasalized by the dual *-ndzi* or plural *-mu* indexation
 2401 suffixes (§14.2.1.2): *pjuu-fkaβ-nuu* (IPFV-cover-PL) ‘they cover it’ (example 163,

4 Consonant clusters and partial reduplication

§15.1.5.11) cannot be realized as †[pjifkámnu]. The same is true in noun compounds, for example *jłvβndz̥u* ‘weft stick’ from *tu-jłvβ* ‘weft’ and *ndz̥u* ‘stick’.

A puzzling cluster *-p.t-* is observed in the numeral *sqaptuy* ‘eleven’ (§7.1.3). The *-p-* is a linking element between the bound form *sqa-* ‘ten’ and the following numeral, also found in other Gyalrongic languages (Jacques 2017c), but its expected form would be the preinitial *f-* (from /w/) in this position; it is better analyzed as the coda of the first syllable.

The dental /t/, which exists as coda (§3.2.2), but not as preinitial (§4.2.1), is attested in heterosyllabic clusters followed by unvoiced labial or velar stops, mainly in Tibetan loanwords such as *rgytpu* ‘old man’ (from རྒླ དྲྲ *rgad.po* ‘old man’) or *mtçʰytkʰo* ‘house shrine’ (on which see §3.3.3). In compounds, the coda /t/ is either lost in non-final syllables (§5.4.2.2), or nasalizes to [n] if the following segment is a nasal sonorant or a prenasalized obstruent (§5.4.2.1), in particular with the dual *-ndzi* and plural *-nu* indexation suffixes (§14.2.1.2), so that even heterosyllabic clusters with /t/ a first element are infrequent.

Exceptions to the loss of *-t* before coronal stops and affricates do exist, however, for instance *trçphyrta*, the name of a type of sewing method, compound of *tr-çpʰy* ‘patch’ (§16.4.6) with the verb *ta* ‘put’ (§22.4.2.6). In this noun, a geminated *-t.t-* occurs across syllable boundaries.

While dental fricative preinitials cannot precede affricates (§4.2.1.2), the coda /z/ does occur before the dental affricate *tsʰ-* in the cluster *-s.tsʰ-* in *mbryst̥s'i* ‘rice soup’ (from *mbryz* ‘rice’ and *tuts'i* ‘rice gruel’), assimilating in voice (§5.4.2.1).

The preinitial /j/ is not compatible with palatal and alveolo-palatal initials (§4.2.1.6), but the coda /j/ can precede those segments across syllable boundary, as in *qajzmbraꝝ* ‘ear of wheat’ from *qaj* ‘wheat’ and *zmbraꝝ* ‘ear’ (of corn).

The velar coda /ɣ/ is generally deleted before velar stops, even in reduplicated ideophones. For instance, the pattern II ideophone (§10.1.2.2) from the root |gry| ‘curved; moving with difficulty’ is *grygry*, though *grygry* is also possible. There is only one example of *y* preceding a uvular segment even across syllable boundaries: the sigmatic causative *suγbaꝝ* ‘cause to hatch’ from *baꝝ* ‘hatch’ (§17.2.1.4). The Tibetan form མྚྱ ཉྱྱ *brug.glog* ‘thunder and lightning’ would have been expected to yield †*mbruy.y.blos* in Japhug, but we find instead *mbruyloꝝ* (in dialects other than Kamnyu) or *mbyurloꝝ* ‘thunderstorm’ in Kamnyu with irregular metathesis of *y* and *r*.

The uvular /ʁ/ can surface before velar and uvular stops in heterosyllabic clusters (unlike when it occurs as preinitial, §4.2.1.8), as in *taʁki* ‘up and down’ (§5.5.2.2; realized as [taχki]) and *qʰoʁqʰoꝝ* ‘ingot’. The uvular coda is deleted, however, in the compound *paskṛy* ‘pig to be fattened’ from *pax* ‘pig’ and *skṛy* ‘fatten’ (pig), avoiding the non-attested cluster *-ʁ.sk-*.

When preceding unvoiced obstruents, the fricative codas /z/, /ɣ/ and /β/ assimilate in voice and are converted to [s], [x] and [β], respectively (§5.4.2.1).

Onset clusters with nasal preinitials followed by non-nasal sonorants have been completely eliminated by a series of sound changes detailed in §4.2.1.9. However, the nasal codas /m/, /n/ and /ŋ/ can occur before syllables with *l*-, *r*-, *j*-, *w*-, *ɣ*- or *β*- as onset. For instance, we find *-n.l-* in *srunloʂ* ‘ring’, *-m.ɣ-* (instead of *-mbr-*) in *nxtsumyut* ‘take away and bring back’ (from *tsum* ‘take away’ and *yut* ‘bring’, §20.12), *-n.r-* in *smynruy* ‘medicinal plants’ (from བླକ୍ଷ୍ମୀ ສମାନ୍ ରିଗ୍ସ sman.rigs ‘type of materia medica’) or *-m.j-* (instead of *-mj-*) in *zumjuw* ‘barrel handle’ (compound of *zum* ‘bucket’ and *uu-ju* ‘its handle’, from བླକ୍ଷ୍ମୀ འୟମ୍ རୋମ୍ ‘bucket’ and སୁର୍ବଲ ଜୁବା ‘handle’, respectively).

These clusters, although heterosyllabic, are reduplicated as a whole when partial reduplication is applied, as in the comitative adverb (§5.8.1) *kṛ-srunlu~nloʂ* ‘together with his/her ring’ from *srunloʂ* ‘ring’ (instead of *†kṛ-srunlu~loʂ*, an incorrect form).

More complex clusters with a nasal as first element are found when the second member of the compound has a complex onset, for instance *-n.rz-* in *χčun-rzi* ‘Yama’ (from གୈନ୍ ར୍ଦେ ༁୍ གୈନ୍.ର୍ଦ୍ଜେ ‘Yama’, the Buddhist god of the underworld) and *-m.xts^h-* in *jpumxts^hum* ‘thickness’ (a compound noun derived from *jpum* ‘be thick’ and *xts^hum* ‘be thin’, §5.5.2.2).

Some heterosyllabic clusters are avoided by insertion of an anaptyctic vowel /u/, in particular in Tibetan loanwords. For instance, ཤେଷ୍ମ རୁଣ୍ସ sems.sdug ‘sadness, worry’ is borrowed as *sumuzduy* ‘worry’ instead of expected *†sumzduy*, with the *u* breaking the cluster *-m.-zd-*.

The anaptyctic vowel can be /i/ if the cluster in the second syllable has a palatal or alveolo-palatal preinitial. For instance, *čom* ‘iron’ and *tr-jŋoʂ* ‘hook’ are compounded as *čymijoʂ* ‘iron hook’, in which the preinitial /j/ is converted to /i/.

4.2.3.2 The sonority sequencing principle in Japhug

A considerable amount of work in phonology supports the idea that the segments of the world’s languages follow a universal scale of sonority (for instance Venne-mann 1988; Blevins 1995; see Ohala 1990 for an opposing view). Several versions of this sonority hierarchy have been proposed, for instance (§5) (Parker 2002: 235).

- (5) low vowels > mid vowels > high vowels > /ə/ > glides > laterals > flaps > trills > nasals > /h/ > voiced fricatives > voiced stops > voiceless fricatives > voiceless stops and affricates

4 Consonant clusters and partial reduplication

The notion of sonority is invoked in particular to account for observed generalizations in the structure of consonant clusters: in many languages, clusters follow the so-called *sonority sequencing principle* (ssp, Blevins 1995: 210):

- (6) ‘Between any member of a syllable and the syllable peak, a sonority rise or plateau must occur.’

According to this hierarchy, in onset clusters, sonorants are expected to be closer to the syllable nucleus than obstruents (*krV* is favoured over *rkV*), and glides to be closer to the nucleus than any other consonant (*mjV* is preferred over *jmV*).

Japhug, like other Gyalrongic languages (see in particular Sun 2000b and Lai 2017: 73), is rich in ssp-infringing clusters.

For instance, the 17 biconsonantal clusters with /j/ as first element (13 in §4.2.1.6 and 5 in §4.2.2) all contravene the ssp except for /jw/. Moreover, some of these clusters, such as /jtʂʰ/, /jm/ and /jŋ/, have no ssp-compliant counterpart: †/tʂʰj/, †/mj/, and †/ŋj/ are not attested as syllable onsets (though the last two can occur across syllables, §4.2.3.1).

A certain number of ssp-compliant clusters have been removed by sound changes, in particular **mj-* → *mp-*, **mr-* → *mbr-* (§4.2.1.9) and **tr-* → *tʂ-* (§4.2.2.4).

4.3 Sandhi

Word boundaries in Japhug can be defined by a combination of criteria, including stress (§3.7) and also morphology in the case of verbs (§11.6.1), but they are not completely impenetrable from a phonological point of view: some sandhi phenomena, including assimilation and resyllabification, do occur across word boundaries.

First, the codas /-z/, /-r/, /-y/, /-ŋ/ can assimilate in voicing to the following consonant (§3.2.2), as in heterosyllabic clusters (§4.2.3.1).

Second, the coda /-t/ is nasalized when directly followed by a nasal or pre-nasalized segment, and tends to drop when followed by a dental, alveolo-palatal and retroflex segment. In (§7) for example, the -*t* coda of *rumtçʰyt* ‘offering to the mountain’ drops before the ç- translocative prefix and that of *lxt* merges with the following affricate *tç*.

- (7) *rumtçʰyt* *c-cʰúr-wy-lxt* *tce*
mountain.offering TRAL-IPFV:DOWNSTREAM-INV-release LNK
jwə-pʰyn
SENS-be.efficient
'If you go and make offerings to the mountain (god), it will solve (your

2511 problem)' (Lobzang, 26)

2512 These rules are optional, and it is possible to find examples in the corpus where
 2513 they do not take place. For instance, in (§8), the coda *-t* of *to-lxt* is clearly audible
 2514 even before *r*.

- 2515 (8) *turpa ci to-lxt ri*
 axe once IFR-release LNK
 2516 'He wielded his axe, but ...' (140430 jin e-zh, 39)

2517 Third, when a [preinitial+initial] cluster is preceded by an open syllable, the
 2518 preinitial can be resyllabified as coda of the previous syllable. In (§9) for instance,
 2519 the preinitial *χ*- of *χc^hoze* 'right and left' becomes the coda of *-rna* and voices to
 2520 [ɪ], and yields a sequence [-rma^h.c^ho-]. This type of phenomenon is considerably
 2521 rarer than the previous ones.

- 2522 (9) *wi-rna χc^hoze zo ko-sti.*
 3SG.POSS-ear left.and.right EMPH IFR-plug
 2523 'He plugged both hid left and his right ears.' (140514 huishuohua de
 2524 niao-zh, 195)

2525 Fourth, when a word ending in open syllable precedes a vowel-initial word
 2526 (§3.3.1.4), the initial vowel *a*- and *wi*- of the latter very commonly merge with
 2527 the final vowel of the former. For instance, the sentence in (§10) is realized as
 2528 [amuxtsa:punju]: the *wi*- prefix is elided by merging with the preceding *u*, and the
 2529 -*a* rhyme of *wi-xtsa* merges with the *a*- prefix of the following word, yielding a
 2530 phonetically long [a:].

- 2531 (10) *a-mu wi-xtsa a-pui-ŋu pui-ra*
 1SG.POSS-mother 3SG.POSS-shoe IRR-IPFV-be SENS-be.needed
 2532 'Let (me take this) shoe (as a present) for my mother.' (tWxtsa 2003, 11)

2533 External sandhi is not represented in the transcription used in this grammar.

2534 4.4 Tibetan script-based orthography

2535 The IPA orthography chosen to write Japhug in this grammar is probably not
 2536 viable for use by native speakers, and an alternative writing system based on
 2537 Tibetan script is preferable. Fortunately, it is relatively easy to transcribe Japhug
 2538 into Tibetan script.

4 Consonant clusters and partial reduplication

The retroflex affricates can be represented by the Sanskrit symbols for retroflex stops (ऋ /tʂ/, ॠ /tʂʰ/ and ঢ /dʐ/) and the retroflex fricative by the corresponding Sanskrit consonant (ঢ় /ʂ/).

The glide /w/ in initial position can be written as ခ /w/ with ခုနှစ်ရာတွေ *tsʰa.rtags*, but as medial (§4.2.2.1) the ခုနှစ် *wa.zur* can be employed. Medial -y- and -s- can be represented by underscript ယ and ရ, for instance in ပျော် *pyaၢ* ‘turn over’ and ဒို့အုန္တာ *tui-ndz̥i* ‘collar bone’.

The clusters with fricatives preceding prenasalized obstruents can be transcribed by combining a prefixed \textlangle marking prenasalization with a superfixed letter marking the fricative, as in $\text{\textlangle}z\text{\textrangle}mbru$ ‘boat’, $\text{\textlangle}z\text{\textrangle}ngri$ ‘star’ or $\text{\textlangle}z\text{\textrangle}nde$ “wall”. Since the voicing contrast is neutralized in this position (§4.2.1.2, §4.2.1.5), the unvoiced fricative symbols $\text{\textlangle}s\text{\textrangle}$ and $\text{\textlangle}t\text{\textrangle}$ can be used.

The following examples illustrate how this script can be used to write complete sentences.

- (11) *c-tx-χtui-t-a*
 TRAL-AOR-buy-PST:TR-1SG
 $\ddot{\text{શ}}\text{-તું-થુા}$
 'I went and bought it.'

(12) *tx-rzaβ* *nui pŷr-ry-cpʰyt*
 INDEF.POSS-wide DEM IFR.IPFV-APASS-patch
 $\ddot{\text{દ}}\text{-કુંડા-ર્યું-રચના}$
 'The wife was patching clothes.'

- 2574 (13) *uu-me nuu kuu andi paχci puu-ntsye ŷu*
3SG.POSS-daughter DEM ERG west apple IPFV-sell be:FACT
2575 དේජීංච්ඡ བු མු මු පැකි පු න්ස්යේ යු
2576 ‘Her daughter is selling apples over there.’

²⁵⁷⁷ 5 Nominal morphology

²⁵⁷⁸ This chapter focuses on possessive prefixes, compounding and noun derivations.

²⁵⁷⁹ It does not discuss flagging, number and quantification, as these grammatical
²⁵⁸⁰ categories are expressed by independent words or clitics, such as postpositions
²⁵⁸¹ and noun modifiers, and are treated in chapters 8 and 9.

²⁵⁸² Nominalization (including lexicalized deverbal nouns) and denominal verbal-
²⁵⁸³ ization are treated in chapters 16 and 20, respectively.

²⁵⁸⁴ The morphology of counted nouns (quantifiers, time nominals) is discussed in
²⁵⁸⁵ §7.3, and that of nouns of location in §8.3.4.

²⁵⁸⁶ 5.1 Possessive prefixes

²⁵⁸⁷ Nouns in Japhug can be divided into four main subclasses, inalienably possessed
²⁵⁸⁸ nouns, alienably possessed nouns, unpossessible nouns and counted nouns, de-
²⁵⁸⁹ pending on the type of prefixes they can take. The present section focuses on the
²⁵⁹⁰ first two, the ones that are compatible with possessive prefixes. Unpossessible
²⁵⁹¹ nouns are treated in §5.2, and counted nouns in §7.3.

²⁵⁹² 5.1.1 Possessive paradigm

²⁵⁹³ The paradigm of possessive prefixes in Japhug is shown in Table 5.1. It presents
²⁵⁹⁴ obvious commonalities with the personal pronouns (§6.1) and the indexation suf-
²⁵⁹⁵ fixes (§14.8.1). Table 5.1 includes comparative data on the dialect of Tatshi (from
²⁵⁹⁶ Lin & Luoerwu 2003, Lin 2011 and personal communication), which differs from
²⁵⁹⁷ Kamnyu in having non-palatalized forms in the dual prefixes.

²⁵⁹⁸ In this paradigm, the contrast between second and third person is neutralized
²⁵⁹⁹ in the dual and plural, while it is preserved in pronouns and person indexation.

²⁶⁰⁰ The indefinite possessor prefixes *tu-*/*tr-*/*ta-* are only found on inalienably pos-
²⁶⁰¹ sessed nouns (§5.1.2.1). Possessive prefixes other than the indefinite possessor
²⁶⁰² prefixes are collectively referred to as “definite possessor prefixes”.

²⁶⁰³ The vowel contrast /u/ vs. /y//a/ on the indefinite possessor prefixes is lexi-
²⁶⁰⁴ cally determined (§5.1.2.1). This contrast is neutralized on definite possessor pre-
²⁶⁰⁵ fixes, which all have the same form regardless of the noun. This neutralization

5 Nominal morphology

Table 5.1: Possessive prefixes in Japhug

Person	Kamnyu dialect	Tatshi dialect
1SG	<i>a-</i>	<i>a-</i>
2SG	<i>nṛ-</i>	<i>na-</i>
3SG	<i>u-</i>	<i>ə-</i>
1DU	<i>tći-</i>	<i>tsə-</i>
2/3DU	<i>ndži-</i>	<i>ndzə-</i>
1PL	<i>ji-</i>	<i>ji-</i>
2/3PL	<i>nuu-</i>	<i>nə-</i>
indefinite generic	<i>tuu-/tr-/ta-</i> <i>tuu-</i>	<i>tə-/ta-</i> <i>tə-</i>

2606 is an innovation: in Situ, the vowel contrast is present on all possessive prefixes
 2607 (Lín 1993: 168–169),¹

2608 Stacking of possessive prefixes is not allowed in Japhug, with the exception of
 2609 the combination of a definite possessor prefix with an indefinite possessor prefix
 2610 *tuu-* or *tr-* to turn an inalienably possessed noun into an alienably possessed one
 2611 (see §5.1.2.9).

2612 The only irregularities in possessive morphology are found with *a-* initial
 2613 nouns (§5.1.1.1).

2614 5.1.1.1 *a-* initial nouns

2615 Unlike verbs (see §12.3), nouns whose stem begins with a *a-* are extremely rare
 2616 in Japhug. Nevertheless, as is the case with verbs, the vowel *a-* merges with any
 2617 prefixed element, so that nouns of this type do not have regular possessive forms.
 2618 The only noun in *a-* to commonly receive possessive prefixes is *araꝝ* ‘liquor’ (a
 2619 loanword from 阿拉嘎 *ʔa.rag* ‘liquor’). Its possessive forms are highly anomalous:
 2620 1SG *aꝝr-araꝝ*, 2SG *nṛꝝr-nṛ-araꝝ* and 2PL *nūzꝝr-nū-araꝝ* (as in 1), combining the pronoun
 2621 in *status constructus* followed by the possessive prefix, which takes over the initial
 2622 *a-*.

- 2623 (1) *nūzꝝr-nū-araꝝ* *úr-ra*
 2PL-2PL.POSS-liquor QU-be.needed:FACT
 2624 ‘Do you need liquor?’ (elicited)

¹Prins (2016: 118–119) analyzes the vowel as part of the nominal root.

To account for these forms, it is necessary to assume that the initial *a-* was re-analyzed as a 1SG possessive prefix. However, this analysis did not occur directly. The expected 1SG possessive form **a-arav* (1SG.POSS-liquor) would automatically yield **a-rav* by vowel fusion (following the rule described in §12.3). The resulting 1SG **a-rav* then became the pivot for the analogical reshaping of the rest of the paradigm, from which for instance **nx-rav* (2SG.POSS-liquor) was generated (replacing putative earlier forms such as **nx-arav* */*naraav*/). Due to homophony with the base noun *arav*, the 1SG pronoun *azo* was systematically added and **azo a-rav* underwent morphological fusion to the attested *azv-rav*, followed by the rest of the possessive paradigm.

5.1.1.2 The expression of possession

Possession cannot be expressed without a possessive prefix on the possessee, except for a handful of constructions where a pronoun occurs instead (§6.1.2).

Possessive prefixes can be used on nearly any noun (except the unpossessed nouns, see §5.2), including recent borrowings from Chinese (or quasi-code switching), as 老家 *lǎojiā* ‘native place’ in (2). They also occur on several non-finite verbal forms, including participles (see §16.1.1 and §16.1.2.1), bare infinitives (§16.2.2) and degree nominals (§16.3).

- (2) *azo yu a-<laojia>* *yuu ui-lycu* *nure ri*
 1SG GEN 1SG.POSS-old.house GEN 3SG.POSS-upstream there LOC
 ku-ryzi-nuu nyu
 IPFV-stay-PL be:FACT
 ‘They live in a place upstream from my old house.’ (14-siblings, 238)

In the case of first or second person possessors, it is possible to have simply a possessive prefix on the noun, (*a-yni* ‘my friend’, *a-mbro* ‘my horse’ and *a-ugra* ‘my enemy’ in 3), a personal pronoun and a possessive prefix (same person and number, as in 4) or even a pronoun, the genitive clitic *yuu* and a possessive prefix as in (2) (§8.2.3.1).

- (3) *a-yni ci tui~tui-nyu nx, a-mbro*
 1SG.POSS-friend INDEF COND~2-be:FACT LNK 1SG.POSS-horse
 ui-lwa ui-tav ky-zo, a-ugra ci tui~tui-nyu
 3SG.POSS-mane 3SG-on IMP-land 1SG.POSS-enemy INDEF COND~2-be:FACT
 nx, a-mbro ui-jme ui-tav ky-zo
 LNK 1SG.POSS-horse 3SG.POSS-tail 3SG-on IMP-land
 ‘If you are my friend, land on my horse’s mane, if you are my enemy, land
 on my horse’s tail.’ (2002 qaCpa, 196)

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- 2656 (4) *azō a-mbro nyrwurumbotč^hi ŋu, tuu-sŋi xpaxts^hyt ci*
 1SG 1SG.POSS-horse ANTHR be:FACT one-day yojana INDEF
 2657 *pú-wy-tsum-a c^ha*
 IPFV:WEST-INV-take.away-1SG can:FACT
 2658 ‘My horse is Norbu Rinpoche, he can make me cross one yojana per day.’
 2659 (2003smanmi2, 54)

2660 It is possible to have a first singular possessive preceded by a first plural pro-
 2661 noun, as in (5) (see §14.6.1 for other examples of person mismatch involving 1PL
 2662 pronouns).

- 2663 (5) *izo a-mu nuu t^hamt^ham kurcysqaptuy t^hur-azyut ŋu.*
 1PL 1SG.POSS-mother DEM now 81 AOR-reach be:FACT
 2664 ‘My mother is now 81.’ (2010-histoire09-2, 15)

2665 In the case of a possessee shared by the speaker and the addressee, the 1SG pos-
 2666 sessive is the preferred form. For instance, a couple of parents or grandparents
 2667 talking to each other about their son or their grandchild more often use *a-tčuu*
 2668 ‘my son’ or *a-ye* ‘my grandchild’ than a 1DU or a 2SG possessor such as *tči-ye* ‘our
 2669 grandchild’ or *ny-ye* ‘your grandchild’, as I have noticed by participant observa-
 2670 tion. Nevertheless, the use of other possessive prefixes than 1SG in such contexts
 2671 is not ungrammatical, and systematically occurs in texts translated from Chinese
 2672 (by calquing), as in (6).

- 2673 (6) *tči-tčuu nuu-syžduuxpa,*
 1DU.POSS-son SENS-be.pitiful
 2674 ‘Our poor son!’ (150831 renshen wawa-zh, 17)

2675 5.1.1.3 Definiteness and obviation

2676 Nouns with a definite possessor in Japhug can be indefinite, unlike in most lan-
 2677 guages of Europe. They can occur with an indefinite determiner (example 3
 2678 above). With a quantifier such as *tuu-rdoš* ‘one piece’ as in (7), a noun with a
 2679 definite possessor is interpreted as referring to a certain number of persons out
 2680 of a group (‘one of his X’).

- 2681 (7) *ty-tčuu nuu kuu uu-zda tuu-rdoš uu-p^he to-ti,*
 INDEF.POSS-son DEM ERG 3SG.POSS-companion one-CL 3SG-DAT IFR-say
 2682 *tuu-rdoš nuu kuu li ci uu-p^he tce*
 one-CL DEM ERG again INDEF 3SG-DAT LNK

2683 *jv-k-y-su~ymai-mts^hu~mts^hym-nu*
 IFR-PEG-RECIP-CAUS-RECIP-hear-PL

2684 ‘The boy told one of his companions, and that one another one, and (in
 2685 this way) they informed each other.’ (2012Norbzang, 82)

2686 Unlike in Algonquian languages, but like in Mapudungun (Haude & Zúñiga
 2687 2016), nouns with a third person possessor are not automatically obviative, and
 2688 inverse marking on the verb (§14.3.2.2) is not required if the subject is a possessed
 2689 noun whose possessor is also object of the same sentence, as shown by example
 2690 (8) where the direct form *na-βde* appears (see Jacques 2010a and §14.3.3.2 for ad-
 2691 ditional discussion). The inverse *nú-wy-βde* is also possible in exactly the same
 2692 context – example (9) comes from the same text and refers to the same event.

2693 (8) *wi-rzaβ nua kua na-βde*
 3SG.POSS-wife DEM ERG AOR3→3'-throw.away
 2694 ‘His_i wife left him_i.’ (14-siblings, 289)

2695 (9) *wi-rzaβ c^ho wi-tciu nua внахна kua ná-wy-βde*
 3SG.POSS-wife COMIT 3SG.POSS-son DEM both ERG AOR-INV-throw.away
 2696 ‘His_i wife and his_i son left him_i.’ (14-siblings, 294)

2697 Although not obligatory, the inverse on the verb (like in example 9) is more
 2698 common than a direct form (example 8) in this type of configuration (§14.3.2.2).

2699 5.1.1.4 Other uses of possessive prefixes

2700 Possessive prefixes are also used to express beneficiaries, recipients and other
 2701 oblique arguments, such as the ‘person needing’ in the construction with the
 2702 verb *ra* ‘need, have to’, as in (10).²

2703 (10) *a-mbro taŋndo kua-tso ci tci ra*
 1SG.POSS-horse speech SBJ:PCP-understand one also be.needed:FACT
 2704 ‘I also need a horse who understands speech.’ (2003kAndzwsqhaj2, 52)

2705 In the case of beneficiaries and recipients, if a genitive pronoun or genitive
 2706 phrase is present, the presence of a possessive prefix is possible (11) but not oblig-
 2707 atory (12), in particular in the case of possessed nouns that already have a definite
 2708 possessor (13).

²See §8.2.3.2 for a more detailed account of the expression of beneficiaries in Japhug.

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- 2709 (11) *azuy a-kui-ra ci tu tce nuu 'ya'*
 1SG:GEN 1SG.POSS-SBJ:PCP-be.needed INDEF exist:FACT LNK DEM yes
 2710 *ty-ti ra*
 IMP-say be.needed:FACT
 2711 ‘There is one thing I need, and you have to say ‘yes’ to it.’ (140429 qingwa
 2712 wangzi-zh, 47)
- 2713 (12) *azuy kui-ra me*
 1SG:GEN SBJ:PCP-be.needed not.exist:FACT
 2714 ‘I don’t need anything.’ (2005 Norbzang, 275)
- 2715 (13) *azuy uu-lu ra*
 1SG:GEN 3SG.POSS-milk be.needed:FACT
 2716 ‘I want its milk.’ (02-deluge2012, 12)

2717 We also find 3SG possessive prefixes *uu-* indexing not a possessor or a benefi-
 2718 ciary/recipient, but anaphorically referring to a whole clause, as in (14), where
 2719 *uu-cʰa* does not mean ‘its/his alcohol’, but ‘the alcohol made in the fashion de-
 2720 scribed in the previous clause’.

- 2721 (14) *kuicunguu tce icqʰa zmbruuβjaj nuu kui nuunu*
 in.former.times LNK the.aforementioned boat.oar DEM ERG DEM
 2722 *cʰa nuu tú-wy-su-cmi tce uu-cʰa muam*
 alcohol DEM IPFV-INV-CAUS-MIX LNK 3SG.POSS-alcohol be.tasty:FACT
 2723 *tu-ti-nuu puu-ŋgryl*
 IPFV-say-PL PST.IPFV-be.usually.the.case
 2724 ‘In former times, people used to mix the alcohol with boat oars, the
 2725 alcohol (made this way) is tasty, they used to say.’ (cha-31, 41-2)

2726 5.1.1.5 The form of the 3SG possessive prefix

2727 Japhug differs from other Gyalrong languages (Table 5.2, data from Sun & Shi-
 2728 danluo 2002, Gong 2014) in that the third person possessive prefix is *not* ho-
 2729 mophonous with the inverse prefix.

2730 Independently of the question of whether these two prefixes could be histori-
 2731 cally related (Sansò 2014), it is probable that Japhug is innovative here.

2732 In the same way as the inverse prefix *yu-* has an allomorph transcribed as -
 2733 *wy-* when preceded by another prefix, realized as vowel rounding in most cases
 2734 (§14.3.2.7), there is a possible trace of a vowel rounding allomorph of the posses-
 2735 sive prefix in the linker *núndza* ‘for this reason’ (§25.5.1).

Table 5.2: The form of the 3SG possessive prefix in Gyalrong languages

	3SG.POSS	inverse
Japhug	<i>w-</i>	<i>yw-/wy-</i>
Tshobdun	<i>o-</i>	<i>o-</i>
Zbu	<i>wə-</i>	<i>wə-</i>
Situ	<i>və-</i>	<i>və-</i>

This linker originates from a phrase combining the demonstrative *nuu* ‘this’ (on which see §6.9.1, §9.1.2 and §9.1.5.4) with the 3SG possessed form of the noun *wu-ndza* ‘reason’ (§25.5.2). The form *núndza* possibly reflects earlier **nuu-w-ndza*, *-*w-* being a frozen allomorph of the 3SG possessive prefix in non-initial position.³

There is a possible trace of the expected allomorph *†yw-* (from proto-Gyalrong **wə-*) in the noun *yufsu* ‘friend’, etymologically ‘his equal’; the inalienably possessed noun *w-fsu* ‘equal in size to’, which shares the same root, has a regular possessive prefix that is coreferent with the standard of comparison (as in 15 with the 3PL; see §26.3.1.3 on this construction). The alienably possessed noun *yufsu* ‘friend’ is thus possibly a lexicalized equivalent of *w-fsu* ‘equal in size to’ (used in one of the equative constructions, §26.3.1.3), whose 3SG prefix was frozen before the change from **yw-* to *w-* occurred.

- (15) *turme kui-mbro* *ra nuw-fsu* *jamar tu-zyuit* *ma*
 person SBJ:PCP-be.high PL 3PL.POSS-equal about IPFV-reach apart.from
my-cha
 NEG-can:FACT

‘It can only grow about as high as a tall human.’ (15-babW, 4)

Furthermore, additional evidence for the idea that the third person prefix contained **w-* comes from the etymology of the reflexive prefix *zyw-*, which is argued to originate from the third person pronoun (§18.3.7).

It remains unclear why the regular allomorph of the third person possessive is *w-* rather than expected *†yw-*. A possible explanation could be false segmentation, due to reanalysis with the genitive marker *yw*, since the genitive can optionally occur between the possessor and the possessee, as in (16). A pre-Japhug form

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2758 such as **qaçpa yuu-pu* could have been misanalyzed as *qaçpa yuu u-pu* due to vowel
2759 fusion sandhi (§4.3), and a new allomorph *u-* extracted from such constructions.⁴

- 2760 (16) *nunuu qaçpa yuu u-puu yu tce,*
DEM frog GEN 3SG.POSS-young be:FACT LNK
2761 ‘It (the tadpole) is the young of the frog.’ (hist-28-kWpAz, 220)

2762 5.1.2 Inalienably possessed nouns

2763 5.1.2.1 Morphology

2764 Inalienably possessed nouns differ from alienably possessed ones in that they
2765 require the presence of a possessive prefix. Unless when used with the indefinite
2766 possessor prefixes, inalienably possessed nouns are not formally distinguishable
2767 from alienably possessed ones; for instance, *a-pi* ‘my elder sibling’ and *a-mbro*
2768 ‘my horse’ both take the 1SG *a-* prefix and no direct clue indicates that the first
2769 noun is inalienably possessed and that the second one is alienably possessed.

2770 The citation form however differs between inalienably and alienably possessed
2771 nouns: the former must take an indefinite possessor prefix (or in some cases a
2772 3SG *u-*), while the latter can occur without possessive prefix, as for instance *tr-pi*
2773 ‘elder sibling’ (with the indefinite *tr-*; the bare root *tpi* is not a correct form) vs.
2774 *mbro* ‘horse’ (without prefix).

2775 Inalienably possessed nouns are divided into four classes depending on their
2776 citation form. The indefinite possessor prefix has three allomorphs (*tu-*, *tr-*, *ta-*)
2777 whose distribution is not completely predictable on the basis of phonology or
2778 semantics (though some generalizations are provided below). In addition, some
2779 inalienably possessed nouns only take definite possessor prefixes. The contrast
2780 between these four classes is neutralized when the noun takes a definite posses-
2781 sor prefix (unlike in Situ, see Lin 1993: 168–169 and Prins 2016: 118–119).

2782 The most common allomorph of the indefinite possessor prefix is *tu-*. Inalien-
2783 ably possessed nouns selecting this allomorph, such as *tu-jas* ‘hand’, have iden-
2784 tical indefinite and generic possessor forms (see §5.1.3).

2785 The allomorph *tr-* is also very common, in particular with kinship terms and
2786 some body parts (see §5.1.2.3 and §5.1.2.4). The form *ta-* is a phonological variant
2787 of *tr-*, occurring mainly with nouns whose stem begins with a uvular such as
2788 *ta-ŋru* ‘horn’ or *ta-zi* ‘younger sibling’. The contrast between /v/ and /a/ in this
2789 prefix is very difficult to perceive before uvulars with some speakers (see §3.5.4),

⁴The weakness of this hypothesis is that some Japhug dialects have *kua* rather than *yuu* as their genitive marker.

and the transcription adopted in this grammar (and the online corpus and dictionary) is based on the slow syllable-by-syllable pronunciation of these words by Tshendzin. Two inalienably possessed nouns, however, *ta-ma* ‘work’ and *ta-mar* ‘butter’, have the *ta-* allomorph with an initial *m*-, probably originally due to vowel assimilation (§3.3.1.2, §3.5.4).

The minimal pair between *tr-ma* ‘mother’ and *ta-ma* ‘work’ shows that this vowel contrast, however marginal, is distinctive, and that even if the two allomorphs *tr-* and *ta-* were originally phonologically conditioned, it is no longer the case in Kamnyu Japhug.

Some inalienably possessed nouns never occur with indefinite possessor prefixes, for instance *u-tʰor* ‘ground’ is only attested with the 3SG *u-* prefix (see §5.1.2.11). In some cases, the indefinite possessor form is difficult to elicit and in case of doubt the third singular form is given in the dictionary Jacques (2015–2016) (for instance *u-mdor* ‘colour’). Future research may reveal an indefinite possessor form for some of these nouns.

When denominal verbs are derived from inalienably possessed nouns, the vocalism of the denominal prefix tends to be the same as that of the indefinite possessor prefix (for instance *tr-βju* ‘mattress’ → *nγβju* ‘use as a mattress’, not *†nuβju*), though there are exceptions (*tui-rpaχ* ‘shoulder’ → *myrpaχ* ‘carry on the shoulder’), as discussed in §20.6.

By analogy with several non-finite verb forms, in particular the subject participle of transitive verbs and the bare infinitive, which index one argument (the object) by a possessive prefix (§16.2.2), the possessors of inalienably possessed nouns are considered to be *core arguments*, while those of alienably possessed nouns are treated as *adjuncts*. In other words, inalienably possessed nouns have a valency of 1 like intransitive verbs, while alienably possessed nouns have a valency of 0. The indefinite possessor prefix can be viewed as a valency-decreasing device, the nominal equivalent of passive and antipassive derivations, especially given its use in the alienabilization of inalienably possessed nouns (see §5.1.2.9). Wider implications of the assumption that possessors of inalienably possessed nouns are core arguments are explored in §24.6.

5.1.2.2 Inalienabilization

Derivation from alienably possessed to inalienably possessed nouns is not common in Japhug. An interesting case is that of *u-ble* ‘reputation’, which originates from the alienably possessed *qale* ‘wind’ with a reduced form *b-* of the class prefix *qa-*, as some second members of compounds (see §5.4.3.2 and §5.6).

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2826 Conversion of counted nouns (§7.3) to inalienably possessed nouns is a regular
2827 process (§7.3.4.1).

2828 5.1.2.3 Body parts

2829 The great majority of body parts are inalienably possessed nouns with the indefi-
2830 nite possessor *tu-*. These include native words, but also borrowings from Tibetan
2831 such as *tu-q^hoχpa* ‘organs, state of mind’ from Tibetan ཕྱ ཁ ས ད ཉ *k^hog.pa* ‘innards’ (see
2832 §3.4.2 on the phonology of this word).

2833 Among body parts, inalienably possessed nouns selecting the prefix *tr-* are
2834 mainly liquids from the body such as *tr-se* ‘blood’, *tr-spuu* ‘pus’ and *tr-lu* ‘milk’
2835 (though some liquids also take the prefix *tu-*, for instance *tu-ctsi* ‘sweat’), hair
2836 (*tr-rme* ‘hair, fur’, *tr-kvrm* ‘hair (head)’) and some animal body parts (*tr-jme* ‘tail’,
2837 *tr-ŋku* ‘pig skin’, *tr-rk^hom* ‘feather rachis’).

2838 Parts of plants on the other hand mainly have the prefix *tr-*, as *tr-jwax* ‘leaf’,
2839 *tr-tsru* ‘sprout’, *tr-zrym* ‘root’ etc.

2840 Alienably possessed nouns are rare among body parts. Some nouns with the
2841 *qa-* class prefix (see §5.6) such as *qame* ‘mole’ and *qambyo* ‘earwax’ referring to
2842 physical defects or excretions from the body are alienably possessed nouns. A
2843 similar situation is observed in Koyukon Athabaskan, where nouns ‘denoting
2844 certain temporary or abnormal parts of the body’ are also alienably possessed
2845 noun (Thompson 1996: 660), though in Koyukon this subclass is considerably
2846 larger than in Japhug.

2847 The compound *tuciste* ‘amniotic sac’ from *tu-ci* ‘water’ and *tr-ste* ‘bladder’ has
2848 a *tu-* which is originally an indefinite possessor prefix (see §5.1.2.11), but which
2849 has become frozen after being integrated into a compound (§5.1.2.10), as can be
2850 shown by (17).

- 2851 (17) *tu-tuciste* *c^hŋ-ndzyax*
2852 3SG.POSS-amniotic.sac IFR-ACAUS:squeeze.out
‘Her waters have broken.’ (elicited)

2853 5.1.2.4 Kinship terms

2854 The great majority of kinship terms select the indefinite possessor prefix *tr-* or
2855 *ta-* (see chapter 27 for a description of the kinship system). The only kinship
2856 terms in *tu-* are *tu-me* ‘daughter’ (but this form is not attested in the text corpus)
2857 and *tulst* ‘second sibling’; however, the *tu-* prefix in the latter word has become
2858 non-analyzable and this word has become an UN (see §5.2).

2859 There are other UNs among kinship terms, including *woləs* ‘(bad) stepmother’,
 2860 which derives from *tr-łas* ‘mother’s sister’ by replacing the possessive prefix with
 2861 an unidentified element *wo-*, and the social relation collectives (§5.7.8.1). Being a
 2862 UN, *woləs* ‘(bad) stepmother’ cannot take possessive prefixes, and the forms of
 2863 *tr-łas* ‘mother’s sister’ are used instead (*a-łas* can mean ‘my (bad) stepmother’).

2864 Kinship terms do not commonly occur with the indefinite possessor prefix.
 2865 For those denoting spouses, forms with the indefinite prefix are found in the
 2866 expression ‘look for a wife/husband’, as in (18).

- 2867 (18) ‘*ŋoj tu-ce?*’ *to-ti*, ‘*azo tr-rzaβ* *ui-kw-car*
 where 2-go:FACT IFR-say 1SG INDEF.POSS-wife 3SG.POSS-SBJ:PCP-search
 2868 *ce-a*’ *to-ti*. *tce ‘ndzizo ŋoj tu-ce-ndzi?’* *to-ti ri*, ‘*tcizo*
 go:FACT-1SG IFR-say LNK 2DU where 2-go:FACT-DU IFR-say LNK 1DU
 2869 *tr-nmas* *ui-kw-car* *ce-tci’* *to-ti*.
 INDEF.POSS-husband 3SG.POSS-SBJ:PCP-search go:FACT-1DU IFR-say
 2870 ‘She said: ‘Where are you going?’; He said: ‘I am looking for a wife.
 2871 Where are you going?’; She said ‘We are looking for a husband.’
 2872 (2003-kWBRA, 42-45)

2873 Kinship terms also occur with the indefinite possessor prefix to talk about fam-
 2874 ily relationships in abstract terms, as in (19) (see also 55 below). Note that in this
 2875 example the verb is in the generic transitive subject form (§14.3.2.5). The kinship
 2876 terms in this sentence cannot take the generic possessor prefix *tu-*, since only
 2877 one argument in a given sentence can be generic (§14.6.2): if the generic posses-
 2878 sor forms (*tu-rpu* ‘one’s mother’s brother’ and *tu-ftsa* ‘one’s sister’s child’) were
 2879 used instead, the meaning would be completely different (‘One’s uncle cannot
 2880 marry one’s nephew’).

- 2881 (19) *tr-rpu* *c^ho* *tx-ftsa* *ni ci kú-wy-pa*
 INDEF.POSS-MB COMIT INDEF.POSS-ZC DU one IPFV-INV-make
 2882 *mx-kw-k^hu* *juw-ŋu*.
 NEG-INF:STAT-be.possible SENS-be
 2883 ‘Maternal uncles and sister’s children cannot marry each other.’ (140427
 2884 kWmdza stWnmW, 14)

2885 Some kinship terms have an extended meaning when they take the indefinite
 2886 possessor prefix: they can alternatively be used to denote a class of humans based
 2887 on gender and age. The noun *tr-tcw* ‘son’ also commonly means ‘boy’ or even
 2888 ‘male human’ (regardless of age). The nouns *tr-wa* ‘father’ and *tr-mu* ‘mother’

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2889 can denote older people without reference to their children; translations such as
2890 ‘old man’ and ‘old lady’ are more appropriate in these cases, for instance in (20).
2891 The same applies to *tx-wuu* ‘grandfather’ and *tx-wi* ‘grandmother’.

- 2892 (20) *prabkʰarj zuu tx-mu ci uu-ku*
cave LOC INDEF.POSS-mother INDEF 3SG.POSS-head
2893 *tx-kui-wyrum ci zuŋzunj pjy-ryzi tce,*
AOR-SBJ:PCP-be.white INDEF IDPH(II):white IFR.IPFV-stay LNK
2894 ‘In the cave, there was an old woman whose hair was completely white.’
2895 (2003sras, 69)

2896 5.1.2.5 Relator nouns

2897 Relator nouns are a subset of inalienably possessed nouns which have been gram-
2898 maticalized as quasi-adpositions and compensate for the relative dearth of post-
2899 positions in Japhug (§8.2). Some are used to express basic grammatical relations
2900 (such as the dative, §8.3.1), as well as most locative and temporal relations with
2901 noun phrases and subordinate clauses (§8.3.4, §25.3.4.1). A list of relator nouns
2902 and a detailed account of their functions is presented in §8.3.

2903 5.1.2.6 Complement-taking nouns and relativizers

2904 Inalienably possessed nouns can take nominalized or finite clauses as prenom-
2905 inal modifiers. When the head inalienably possessed noun is at the same time
2906 an argument or an adjunct inside its modifying clause, that clause is considered
2907 to be a prenominal relative (§23.4.2). The generic inalienably possessed noun *uu-*
2908 *spa* ‘material’ is in the process of becoming a relativizer when occurring with
2909 a prenominal relative (§23.2.4). In other Gyalrongic languages, such as Khros-
2910 kyabs (Lai 2017: 519), former generic nouns have become fully grammaticalized
2911 as relativizers.

2912 When the head noun is not a participant of the clause, the modifying clause is
2913 a complement clause (§24.6, see Jacques 2016a: 239–241). Inalienably possessed
2914 nouns selecting complement clauses include for instance *uu-skṛt* ‘language, noise’
2915 or *uu-εjiz* ‘wish’ (§24.6.3).

2916 The inalienably possessed noun *uu-mdor* ‘colour’ (from Tibetan མດོ ཡ མດོ ‘co-
2917 lour’) has been further grammaticalized from a complement-taking noun to a
2918 sentence-final particle marker of epistemic modality ‘it looks like...’ (§21.8.3.1).

2919 5.1.2.7 Property nouns

2920 Property nouns are a subclass of inalienably possessed nouns that designate
 2921 (mainly in a derogatory fashion) an entity that possesses a particular character-
 2922 istic. They generally follow another noun as in (21) and (22), but not exclusively
 2923 (25). In the /noun+property noun/ phrase, the latter is the syntactic head but se-
 2924 mantically modifies the former (see §9.1.8 on the various attributes found in the
 2925 noun phrase).

- 2926 (21) <penzi> *w-puu*, *sylarpʰyn w-puu* *jamar puu-wxti*
 2927 basin 3SG.POSS-little.one basin 3SG.POSS-little.one about IPFV-be.big
cʰa
 can:FACT

2928 ‘It can grow about as big as a little basin.’ (18-NGolo, 48)

- 2929 (22) *kʰa w-nqra* *tce znde w-mbe* *ma tʰam*
 2930 house 3SG.POSS-broken.one LNK wall 3SG.POSS-old.one apart.from now
kui-tu me.
 SBJ:PCP-exist not.exist:FACT

2931 ‘Now there is nothing (there), apart from some ruins and old walls.
 2932 (140522 tshupa, 58)

2933 These phrases can be turned into compounds made of the first noun and a
 2934 quasi-suffix corresponding to the property noun. All diminutive and derogatory
 2935 suffixes described in §5.7.3 and §5.7.5 (Table 5.3) have corresponding property
 2936 nouns. In the case of *sylarpʰyn w-puu* from example (21) for instance, it is possible
 2937 to say *sylarpʰyn-puu* ‘little basin’ as one word. In some cases the corresponding
 2938 noun has *status constructus* on the first element, as in *kʰynqra* ‘ruin’ from *kʰa*
 2939 ‘house’ and *w-nqra* ‘broken one’, a form which occurs in (23), in the same text
 2940 as (22) (referring to the same house). The opposite however is not always possi-
 2941 ble; for instance, lexicalized diminutives like *staxpuu* ‘pea’ from *stor* ‘broad bean’
 2942 cannot be turned into a phrase with *w-puu* ‘little one’ as second element.

- 2943 (23) *tce nuu tytsoosta nunuu kʰynqra cti* *tʰam tce kui-ryzi*
 2944 LNK DEM place.name DEM ruins be:AFF:FACT now LNK SBJ:PCP-stay
me
 not.exist:FACT

2945 ‘Now Tatsogsta (‘the place of silverweed’) is a house in ruins, nobody
 2946 lives there.’ (140522 tshupa, 56)

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Property nouns are not necessarily always contiguous to the noun that they follow. In (24), the indefinite determiner *ci* (§9.1.4.1) redundantly occurs both after the constituent *yzuu kuu-xtçuu~xtçi* (a relative clause, §9.1.8.3) and the property noun *wu-puu* ‘the little one’. The nouns *yzuu* and *wu-puu* are thus separated by the participle *kuu-xtçuu~xtçi* and the determiner *ci*.

- (24) *wo nunu, yzuu kuu-xtçuu~xtçi ci wu-puu*
 INTERJ DEM monkey SBJ:PCP-emph~be.small INDEF 3SG.POSS-little.one
ci juu-cti
 INDEF SENS-be.AFF
 ‘Oh, this is (just) a little monkey.’ (18-04-28 xiyouji01-zh, 66)

Table 5.3: Property nouns and corresponding quasi-suffixes

Property Noun	Suffix	
<i>wu-puu</i> ‘little one’	<i>-puu</i>	diminutive
<i>wu-nqra</i> ‘something broken’	<i>-nqra</i>	derogatory
<i>wu-do</i> ‘someone one’	<i>-do</i>	
<i>tr-mbe</i> ‘something old’	<i>-mbe</i>	
<i>wu-k^he</i> ‘something nasty’		
<i>wu-rqu</i> ‘cold thing’	<i>-rquu</i>	other
<i>wu-xso</i> ‘something empty, normal’		
<i>wu-jlu</i> ‘something uncooked’		
<i>wu-maj</i> ‘in big groups’		
<i>wu-rkoz</i> ‘something special’		

The property nouns *wu-do* ‘old one’ and *tr-mbe* ‘old thing’ differ in that the former one is used for living things (including animals and plants), while the second occurs with inanimate objects. The quasi-suffix *-rquu* is mainly used in *tuu-cirquu* ‘cold water’.

The noun *wu-jlu* ‘uncooked’ (used in particular with *stor* ‘broad bean’) has become grammaticalized as a restrictive focus marker (§9.1.6.5).

Property nouns are not commonly used with an indefinite possessor prefix; in attested examples, it is always *tr-*. Their origins are diverse: *wu-puu* ‘little one’ derives from *tr-puu* ‘offspring, young’ (see §5.7.3), while *tr-mbe* ‘old thing’, *wu-k^he* ‘nasty’ and *wu-do* ‘old thing’ originate from *mbe* ‘be old’, *k^he* ‘be stupid’ and *do* ‘be old (of plants)’ by deverbal derivation (§16.4.6). The property noun *wu-maj* ‘in big

groups' derives from *may* 'be many', itself from Tibetan ཡྱନ୍ ཡྱନ୍ 'many'. Some *ts-*prefixed nouns of verbal origin like *tskʰe* 'idiot, fool' (from *kʰe* 'be stupid') may come from former property nouns.

The property noun *w-xso* 'empty, normal' is related to the verb so 'be empty'; it originally comes from its subject participle (the regular form *ku-so* 'empty' is still attested) with loss of vowel and fricativization of the velar participle prefix (see §16.5.2). It had no corresponding quasi-suffix, but does appear as second element in some compounds (see for instance §5.7.8).

The most common meaning of *w-xso* is 'normal, usual, common', a meaning already very different from the base verb. It occurs both before and after the noun with which it is linked (compare 25 and 26). It is also used adverbially meaning 'usually' (27).

- (25) *w-pa* *nua-kui-če* *nua tce kumax turme,*
 3SG.POSS-down IPFV:WEST-SBJ:PCP-go DEM LNK other people
 w-xso *turme ra nua-te^habra pŷ-ŋu*
 3SG.POSS-normal people PL 3PL.POSS-toilet IFR.IPFV-be
 'The toilets for other people, for normal people (not lamas), were on the
 (balcony) facing west under it.' (08-kWqhi, 10)
- (26) *nŷzo turme w-xso* *tua-maꝝ*
 2SG people 3SG.POSS-normal 2-not.be:FACT
 'You are not a normal human.' (150829 taishan zhi zhu-zh, 40)
- (27) *w-xso* *ku-ryzi tce, w-βri* *nunua scob-puꝝ*
 3SG.POSS-normal IPFV-stay LNK 3SG.POSS-body DEM ladle-DIM
 pū-ky-βbum *zo fse*
 AOR:DOWN-OBJ:PCP-cover EMPH be.like:FACT
 '(The ladybug) usually stays (in one place), its body looks like a little
 ladle put upside down.' (26-kWLAGpopo, 3)
- (28) *toꝝde tce tcendyre, nua-xso*
 a.moment LNK LNK 3PL.POSS-empty
 c^hyr-nua-łob-nua.
 IFR:DOWNSTREAM-AUTO-come.out-PL
 'A moment later, they came out empty-handed.' (140512 alibaba-zh, 34)

The obsolete property nouns **w-te* 'big' is not productive, but traces of it are still attested in some compounds (§5.7.4).

2995 5.1.2.8 Exclamative inalienably possessed nouns

2996 A small class of inalienably possessed nouns in Japhug occur as exclamative
 2997 verbless nominal predicates (§22.3), sometimes with the sentence final particle
 2998 *nui* (§10.4.5). This class includes degree nominals (§26.1.2.1), as well as the non-
 2999 derived *tuu-scawa* ‘poor X’ and *tuu-kʰi* ‘lucky X’.

3000 The inalienably possessed noun *tuu-scawa* ‘poor X’ only occurs in the exclama-
 3001 tive constructions, as in (29) and (30). In example (29), the possessive prefix is
 3002 coreferent with the entities that experience suffering (the pigs).

- 3003 (29) *tsuku kuu paŋndza nui-nui-pʰut-nui nui-ŋu ri, paŋ ra*
 some ERG hogwash IPFV-AUTO-pluck-PL SENS-be LNK pig PL
 3004 *nui-scawa ma my-mum ma u-tui-qiaβ*
 3PL.POSS-poor LNK NEG-be.tasty:FACT LNK 3SG.POSS=NMLZ:DEG-be.bitter
 3005 *saxaβ zo.*
 be.extremely:FACT EMPH
 3006 ‘Some people use it (*Sambucus*) as hogwash, poor pigs, it is so bitter.’
 3007 (12-ndZiNgri, 30-31)

3008 The possessive prefix on this noun can also be coreferent not with the per-
 3009 son suffering, but rather with another person who caused it, and expresses his
 3010 apologies in this manner, as in (30).

- 3011 (30) *wo a-tycime a-scawa, wo a-tycime a-scawa*
 INTERJ 1SG.POSS-lady 1SG.POSS-poor INTERJ 1SG.POSS-lady 1SG.POSS-poor
 3012 ‘My lady, sorry (for what) I (have done to you.)’ (2014-kWLAG, 160)

3013 Alternatively, the indefinite possessive form *tuu-scawa* can occur, even if the
 3014 person/entity experiencing misfortune is definite and known, as in (31).

- 3015 (31) *wo tuu-scawa, ku-tui-tso mui-pui-ra*
 INTERJ INDEF.POSS-poor IPFV-2-understand NEG-PST.IPFV-be.needed
 3016 ‘Alas and woe, you should not have known that.’ (2012 Norbzang, 166)

3017 The inalienably possessed noun *tuu-kʰi* ‘how lucky of X’ is another example
 3018 of the nominal exclamative construction, as in (32), with the possessive prefix
 3019 coreferent with the person experiencing good luck. This noun can also occur in
 3020 the idiom *tuu-kʰi + ηguu* ‘be lucky’, as in (33).

- 3021 (32) *cui yuu ŋu kuu, nui-kʰi ye!*
 who GEN be:FACT SFP 3PL.POSS-how.lucky SFP
 3022 ‘Whose are these, how lucky they are!’ (2003 Kunbzang, 220)

- 3023 (33) *a-k^hi* *nur-ŋgw*
 1SG.POSS-lucky(1) SENS-be.lucky(2)
 3024 ‘I am lucky.’ (140425 shizi puluomixiusi he daxiang-zh, 41)

3025 5.1.2.9 Alienabilization

3026 It is possible to turn an inalienably possessed noun into an alienably possessed
 3027 one by adding a definite possessor prefix before the indefinite one; this is the
 3028 only case of possessive prefix stacking in Japhug. This process is very produc-
 3029 tive, and better illustrated by minimal pairs; the following examples involve the
 3030 inalienably possessed nouns *tu-ci* ‘water’, *tr-lu* ‘milk’ and *tr-muj* ‘feather’.

3031 The noun *tu-ci* ‘water’ with a definite possessor (*w-ci* ‘its juice/water’) refers
 3032 either to the juice of a plant, or to water in which a plant has been soaked as in
 3033 (34)

- 3034 (34) *wzo tu-ci* *kw-sx-cke* *w-ŋgw pjú-wy-yx-la,*
 3035 3SG INDEF.POSS-water SBJ:PCP-PROP-burn 3SG-in IPFV-INV-CAUS-soak
tce nuu yuu w-ci *w-ŋgw nuteu tuu-mi*
 LNK DEM GEN 3SG.POSS-water 3SG-in DEM:LOC GENR.POSS-foot
pjú-wy-yx-la *tce numuu, xtcon* *nuu nur-p^hyn*
 3036 IPFV-INV-CAUS-soak LNK DEM, rheumatism DEM SENS-be.efficient
nur-ti-nuu ri,
 SENS-say-PL LNK

3038 ‘One puts it in hot water, and then one puts one’s feet in that water, and it
 3039 is efficient against rheumatism, they say.’ (20-sWrna, 144)

3040 The alienabilized form *w-tu-ci* ‘its water’, as in (35), is used to talk about water
 3041 given to an animal to drink, or water absorbed by a plant.

- 3042 (35) *tceri w-tu-ci* *wuma zo na-uzi*
 but 3SG.POSS-INDEF.POSS-water really EMPH TROP-be.necessary:FACT
 3043 *tce, w-tu-ci* *nuu mur-pjui-mbryt*
 LNK 3SG.POSS-INDEF.POSS-water DEM NEG-IPFV-ACAUS:break
nur-ra.
 SENS-be.needed
 3045 ‘But it needs water a lot, it needs to have water continuously.’ (07-Zmbri,
 3046 11)

3047 When a definite possessor is present on the noun *tr-lu* ‘milk’ in a form such as
 3048 *w-lu* ‘her milk’, that prefix refers to the animal producing the milk, as in (36).

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- 3049 (36) *ty-pi* *kui-wxti* *nui kui nuŋa yui u-lu*
 INDEF.POSS-elder.sibling SBJ:PCP-be.big DEM ERG COW GEN 3SG.POSS-milk
 3050 *nui cʰondyre ui-ca* *nui to-nui-ndo.*
 DEM COMIT 3SG.POSS-meat DEM IFR-AUTO-take
 3051 ‘The elder brother took the cow’s milk and meat.’ (02-deluge2012, 19)

3052 The form *u-ty-lu* ‘his/its milk’ with alienabilization is used on the other hand
 3053 when indicating the person or animal drinking the milk, as in (37).

- 3054 (37) *tce u-t⁹y-lu* *pjúr-wy-rku* *tce numu*
 LNK 3SG.POSS-INDEF.POSS-milk IPFV:DOWN-INV-put.in LNK DEM
 3055 *pjuu-tsʰi* *qʰe,*
 IPFV:DOWN-drink LNK
 3056 ‘People pour milk for it (the cat) to drink, and it drinks it.’ (21-IWLU, 47)

3057 The inalienably possessed noun *ty-muj* ‘feather’ takes as its possessor a bird
 3058 (or a bird body part such as ‘wings’), as in (38).

- 3059 (38) *jinde tce u-kui-sat* *koŋla maje tce, nui*
 nowadays LNK 3SG.POSS-SBJ:PCP-kill completely not.exist:C LNK DEM
 3060 *qarma u-muj* *kuny tua-jab* *múŋ-yi wo*
 crossoptilon 3SG.POSS-feather also GENR.POSS-hand NEG:SENS-come SFP
 3061 ‘Nowadays, nobody kills them, and one cannot get crossoptilon feathers.’
 3062 (23-qapGAmtWmtW, 173)

3063 Its alienabilized form, such as *u-ty-muj* ‘his feather’ in (39), is used when the
 3064 feather is detached from the body of the bird, and belongs to a human.

- 3065 (39) *tytciupuu kui-xtci* *nui yui u-ty-muj* *nui*
 boy:DIM SBJ:PCP-be.small DEM GEN 3SG.POSS-INDEF.POSS-feather DEM
 3066 *li u-t⁹oŋ* *nuutcu pjy-nui-jyŋt*
 again 3SG.POSS-ground DEM:LOC IFR:DOWN-AUTO-go.back
 3067 ‘The younger boy’s feather fell back on the ground again.’ (140510
 3068 sanpian yumao, 68)

3069 As the examples above show, alienabilized inalienably possessed nouns occur
 3070 to refer to disconnected or severed body parts, for instance body parts removed
 3071 from an animal that are used or owned by a human or another animal on which
 3072 they do not grow. They are also used for bodily fluids that have left the body,

3073 or also clothes that are not worn but held in the hand. Similar phenomena are
 3074 observed in other Gyalrong languages (see Sun 1998: 140 on Tshobdun).

3075 The referent marked by the possessive prefix can be beneficiary as in (37) or
 3076 possessor as in (39).

3077 Alienabilization is also observed with prenominal modifiers (§5.1.4), in com-
 3078 pounding, when the indefinite possessor prefix of an inalienably possessed noun
 3079 is preserved in the final member of the compound (see §5.4.3.1), in comitative ad-
 3080 verbs derived from inalienably possessed nouns (§5.8.1) and in conversion from
 3081 inalienably possessed noun to counted noun (§7.3.4.1). A related phenomenon is
 3082 also the optional neutralization of possessive prefixes in relative clauses (§23.3.4).

3083 A lexicalized way of alienabilizing nouns is by compounding with a generic
 3084 possessor. For instance, *pyymuj* ‘feather’ is an alienably possessed noun built from
 3085 the status constructus of *pya* ‘bird’ with the inalienably possessed noun *tr-muj*
 3086 ‘feather’. Here the first element of the compound *pyy-* saturates the inalienable
 3087 possessor without need to use the prefix *tr-*.

3088 5.1.2.10 Frozen indefinite possessors

3089 Alienably possessed nouns with a disyllabic root whose first element is *tuu-* or *tr-*,
 3090 with the exception of loanwords such as *tursa* ‘grave’ (from *dur.sa* ‘grave’),
 3091 are mainly ancient inalienably possessed nouns whose indefinite possessor prefix
 3092 *tuu-* has become frozen and reanalyzed as part of the root. Comparison with other
 3093 Gyalrong languages can demonstrate that such reanalysis took place in Japhug.

3094 For instance, the noun *turme* ‘man’ is alienably possessed in Japhug (as shown
 3095 by examples such as 40), but in Situ the 3SG form of *tə-rmî* ‘man’ is *wə-rmî* (Lin
 3096 2009: 183;197), showing that *tə-* is the indefinite possessor prefix, cognate of Ja-
 3097 phug *tuu-*.

- 3098 (40) *ci nuu tx-tcuu nuu χawo, numu azo a-turme nuu*
one DEM INDEF.POSS-boy DEM INTERJ DEM 1SG 1SG.POSS-man DEM
a-puu-ŋu ndyre, nuu u-tuu-pe nuu
IRR-IPFV-be LNK DEM 3SG-NMLZ:DEG-be.good FSP
‘That boy, if only he could be my man, it would be so nice.’ (2014-kWLAG,
418)

3102 This shift may be due to the fact that the 3SG form is used in Situ in construc-
 3103 tions where the non-possessed form is preferred in Japhug, such as in prenomi-
 3104 nal relatives (Lin 2009: 190), and was therefore less prone to lexicalization. The
 3105 stem *-rme* of *turme* ‘man’ is still attested as second element of compounds like

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3106 *tu-pyrm̥e* ‘one year of life’ (whose first element *pyr-* is related to the stem of *tu-xpa*
3107 ‘one year’, §7.3.1.7).

3108 The noun *trjmyy* ‘mushroom’ is alienably possessed, but the stem *jmyy-* ap-
3109 pears as first element of compounds such as *jmyyi* ‘russula’, suggesting that it
3110 was formerly inalienably possessed and occurred without its indefinite posses-
3111 sor prefix in this compound (see §5.4.2.4). The status of *trjmyy* ‘mushroom’ as
3112 a former inalienably possessed noun is less surprising if one takes into account
3113 the likely etymological relationship with Chinese 帽 *mawH* ‘hat’ (from *m^čuk-s;
3114 etymology suggested by L. Sagart; see also the Tibetan cognate ར୍ମྙୁ *rmog* ‘helmet’,
3115 Zhang et al. 2019). If the noun for ‘mushroom’ in Japhug and other Gyalrongic
3116 languages comes from ‘hat’ (cf Breton *tog touseg* ‘toad hat’ for ‘mushroom’), it is
3117 expected that it would become an inalienably possessed noun (like *tr-rte* ‘hat’),
3118 and for the indefinite possessor *tr-* to become frozen after the noun ceases to be
3119 a term for head covers.

3120 5.1.2.11 Unusual inalienably possessed nouns in Japhug

3121 While it is crosslinguistic expected that nouns of body parts or kinship terms are
3122 inalienably possessed, we also find in Japhug inalienably possessed nouns denot-
3123 ing natural entities such as *tu-ci* ‘water’, *tu-mu* ‘sky, weather’ or *u-t'or* ‘ground’,
3124 a highly unusual fact. There is no grand insight about Gyalrong Weltanschau-
3125 ung to be gained from this observation however; explanations should be sought
3126 in the etymology of these words, and solved on an item per item basis.

3127 The noun *tu-ci* ‘water’ also means ‘juice’ or ‘water in which X has been soaked’
3128 with a definite possessor, as was seen in §5.1.2.9. Cognates are found in Core
3129 Gyalrong languages, but not in West Gyalrongic (Stau *yra* and Wobzi Khroskyabs
3130 *jdâ*, Jacques et al. 2017: 610) or elsewhere in the family, and it is therefore a good
3131 candidate for a Core Gyalrong lexical innovation.

3132 Japhug has a transitive verb *ci* ‘pour completely’ (of grains or liquids), from
3133 which a bare action nominal **u-ci* ‘(liquid/grain) that has been poured out’ could
3134 have been regularly derived (see §16.4.6; similar to *u-ndzuu* ‘instruction, advice’
3135 from *ndzuu* ‘educate’ in example 41 below). The meaning ‘water’ would then be
3136 trivial narrowing of the meaning of this noun ‘water poured out’, then replac-
3137 ing the older term for ‘water’ still preserved in West Rgyalrongic. Bare action
3138 nominals being inalienably possessed nouns (§16.4.6), the form of *tu-ci* ‘water’
3139 accounted for by this etymology.

3140 The stative verb *aci* ‘be wet’ is then derived, after the semantic narrowing, from
3141 the noun *tu-ci* ‘water’ by denominal derivation (§20.2.1) – despite superficially

³¹⁴² looking like a passive of *ci* ‘pour completely (of grains or liquids)’ (§18.1), it is
³¹⁴³ only indirectly derived from it.

³¹⁴⁴ Concerning *tuu-muu* ‘sky, weather’, it superficially resembles a noun with non-
³¹⁴⁵ analyzable *tuu-* prefixal element, but the status of this element as an indefinite
³¹⁴⁶ possessor prefix can be ascertained with rare examples such as (41). In addition,
³¹⁴⁷ note the compound *kundzarmuu* ‘type of rain’ contains the root *-muu* as its last
³¹⁴⁸ syllable (see a precise definition of this noun and a discussion of its etymology
³¹⁴⁹ in 51, §16.1.1.7).

- ³¹⁵⁰ (41) *wu-ndzuu* *mx-kuu-syŋo* *wu-muu*
³¹⁵¹ 3SG.POSS-instruction NEG-NMLZ-S/A-listen 3SG.POSS-sky
³¹⁵² *mbuit*
³¹⁵³ ACAUS:take.off:FACT

‘Those who do not listen to advice from other people do not end well
 (their sky falls).’ (elicited)

³¹⁵⁴ There is no clear explanation of how this noun come have become inalien-
³¹⁵⁵ ably possessed, but I propose here a tentative etymology. Cognates of *tuu-muu*
³¹⁵⁶ ‘sky, weather’ are attested elsewhere in the Trans-Himalayan family, but mainly
³¹⁵⁷ in languages that poorly preserve presyllables (for instance Yongning Na *myŋ*⁷,
³¹⁵⁸ Michaud 2017: 132). Yet, in Rawang, among the conservative languages, has a
³¹⁵⁹ word *dymø* ‘celestial being’ (LaPolla & Poa 2001: 13), with the same vowel corres-
³¹⁶⁰ pondence to Japhug /-uu/ as *sharø* ‘bone’ with *črru* ‘bone’. Moreover, the name
³¹⁶¹ བୁଁ *dmu*, attested in Tibetan texts to refer to a type of divinity, is probably related
³¹⁶² to the Gyalrong etymon for ‘sky’ (Stein 1961: 63–64) and provides additional sup-
³¹⁶³ port for the antiquity of a dental presyllables in this etymon.

³¹⁶⁴ If *dymø* and བୁଁ *dmu* are indeed cognate with Japhug *tuu-muu* ‘sky, weather’,⁵ this
³¹⁶⁵ noun may originally have been disyllabic, and its first syllable reinterpreted as
³¹⁶⁶ indefinite possessor; the form *wu-muu* ‘his sky’ in (41) would then be a backforma-
³¹⁶⁷ tion, an idea compatible with its very marginal character.

³¹⁶⁸ The Japhug noun *wu-tʰor* ‘ground’ cannot take any possessive prefix other than
³¹⁶⁹ 3SG *wu-*, not even the indefinite possessor prefix. It has no known cognates in
³¹⁷⁰ other Gyalrongic languages, but it is a perfect match for a Tibetan word with the
³¹⁷¹ shape *tʰog* (compare the other borrowed noun *tʰor* ‘thunder’ from Tibetan ས୍ତ୍ର དୋ ‘thunder’). Two etymologies accounting for the possessive prefix on *wu-tʰor* can
³¹⁷² be proposed. On the one hand, it could be a bare action nominal (§16.4.6) from

⁵ Another potential cognate could be Rawang *muq* ‘sky, thunder’, but the final glottal stop transcribed -*q* is from a former *-k, and this word is better compared to Situ *ta-rmok* ‘thunder’ (Zhang 2016: 73)

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3174 the transitive verb *t^hor* ‘stamp on’. On the other hand, it could alternatively be a
3175 borrowing from Tibetan, a hypothesis requiring a four step scenario.

3176 First, Japhug borrowed the Tibetan relator noun གོ་ ‘on’ as *w-t^hor* *‘on’
3177 (not attested), adding a third person possessive prefix like all relator nouns (see
3178 §8.3). This relator noun was in competition with the existing native equivalent
3179 *w-tar* ‘on’.⁶

3180 Second, it became restricted to the collocation **srtch'a w-t^hor zuu* ‘on the ground’
3181 (not attested), with the native locative *zuu* and the noun of Tibetan origin *srtch'a*
3182 ‘earth’.

3183 Third, the tautological collocation **srtch'a w-t^hor zuu* ‘on the ground’ was re-
3184 duced to *w-t^hor zuu* ‘on the ground’ (attested).

3185 Fourth, the noun *w-t^hor* ‘ground’ was created by backformation from the loca-
3186 tive phrase *w-t^hor zuu* ‘on the ground’. The fact that the locative postposition /zuu/
3187 is always optional (§8.2.4.1) made this step less unlikely. Thus, Japhug possibly
3188 attests an example of degrammatication (see Norde 2009: 135) from a relator noun
3189 meaning ‘on’ (with or without motion) to a common noun meaning ‘ground’.

3190 The etymologies discussed above suggest that inalienably possessed nouns
3191 referring to natural phenomena in Japhug were created by unrelated pathways.

3192 5.1.2.12 Adverbial inalienably possessed nouns

3193 Some inalienably possessed nouns can be used adverbially (§22.2). In this func-
3194 tion, the possessive prefix can be neutralized to indefinite possessor or third sin-
3195 gular possessor, as *w-stu* ‘truth, truly’ in (42), but in some cases it can also be
3196 coreferent with an argument, and different inalienably possessed nouns display
3197 different alignment patterns.

- 3198 (42) *konyla w-stu zo a-puu-tuu-ry-βzjoz, <zuoye>*
really 3SG.POSS-truth EMPH IRR-PFV-2-ANTIP-study homework
3199 *a-puu-tuu-βze,*
IRR-PFV-2-do[III]
3200 ‘Study seriously, do your homework.’ (conversation 140501, 86)

3201 The prefix of the inalienably possessed noun *w-stu* ‘truth, truly’ can be coref-
3202 erent with the singular or the transitive subject (like the 2SG prefix *nr-* in 43), but
3203 never with the object, thus displaying an accusative alignment.

⁶It is not surprising in Japhug to have several competing relator nouns for the same functional slot; the same is true of the dative *w-čki* and *w-p^he*, see §8.3.1.

- 3204 (43) *nvzo ny-stu zo u-pur-kw-nur-rga-a ny,*
 2SG 2SG.POSS-really EMPH QU-IPFV-2→1-APPL-like-1SG LNK
 3205 ‘If you really love me,...’ (150907 yingning-zh, 147)

3206 On the other hand, *u-βra* ‘it is X’s turn to...’ presents a neutral alignment pat-
 3207 tern: the possessive prefix can be coreferent with the intransitive subject, the
 3208 object (as in 44), or the transitive subject (45).

- 3209 (44) *icq^ha ny-zda nur puu-sat-a yu tce, t^ham tce*
 just.before 2SG.POSS-companion DEM AOR-kill-1SG be:FACT LNK now LNK
 3210 *nvzo ny-βra pjui-ta-sat ra*
 2SG 2SG.POSS-turn IPFV-1→2-kill be.needed:FACT
 3211 ‘I just killed your companion, now it’s your turn.’ (elicited)
- 3212 (45) *nxj ny-βra ty-ndze*
 2SG 2SG.POSS-turn IMP-eat[III]
 3213 ‘It is your turn to eat.’ (elicited)

3214 Thus, the alignment pattern of each adverbial inalienably possessed noun must
 3215 be specified.

3216 5.1.2.13 Biactantial inalienably possessed nouns

3217 A few inalienably possessed nouns, such as words designating speech or presents,
 3218 select more than one argument, and can be considered to be the nominal equiva-
 3219 lent of ditransitive verbs (if alienably and inalienably possessed nouns are com-
 3220 pared to intransitive and transitive verbs, respectively, §5.1.2.1). Since only one
 3221 argument however is marked by a possessive prefix on the noun (possessive pre-
 3222 fix stacking is not possible except for alienabilization, see §5.1.2.9) a choice has to
 3223 be made as to which of the two arguments, the speaker/giver or the addressee/
 3224 recipient, is marked on the noun.

3225 The possessive prefix of inalienably possessed noun *ty-pyro* ‘present’ always
 3226 marks the giver; the recipient of the present (which is optional) receives genitive
 3227 case.

3228 For instance, in (46) the genitive pronoun *nyzuy* encodes the recipient, and
 3229 the 1SG possessive prefix on the noun is coreferent with the subject of the main
 3230 verb. In (47), the recipient is not overt, and the 2SG prefix on the noun is again
 3231 coreferent with the transitive subject of *yut* ‘bring’.

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- 3232 (46) *nyzury a-pyro tc^{hi} ju-yuit-a ra?*
 2SG:GEN 1SG.POSS-present what IPFV-bring-1SG be.needed:FACT
 3233 ‘What present should I bring for you?’ (140504 huiguniang-zh, 28)
- 3234 (47) *nyzo duuxpa puu-tui-tu ma li ny-pyro jy-tuu-yuit!*
 2SG hardship PST.IPFV-2-exist LNK again 2SG.POSS-present AOR-2-bring
 3235 ‘Thank you, you brought another present (for me).’ (elicited)

3236 Other biactantial nouns use possessive prefixes to indicate the recipient rather
 3237 than the agent. For instance, the inalienably possessed noun *ty-rkuz* ‘parting
 3238 present’ (a rare example of -z nominalization suffix in Japhug, see §16.5.1) always
 3239 marks the recipient, as in (48), never the agent – the form *ny-rkuz* ‘your parting
 3240 present’ with 2SG possessive prefix can only mean ‘a parting present for you’,
 3241 not ‘the parting present you give to me/him’.

- 3242 (48) *kuaki ny-rkuz yu*
 DEM:PROX 2SG.POSS-parting,present be:FACT
 3243 ‘This is a parting present for you.’ (28-smAnmi, 266)

3244 In other cases, the alignment of possessive prefixes on an inalienably possessed
 3245 noun depends on the particular construction where it appears. For instance, the
 3246 inalienably possessed noun *tuu-tçʰa* ‘news’ (about someone) marks the recipient
 3247 when used with the verbs *kʰo* ‘give’ or *tu* ‘exist’, but has neutral alignment in
 3248 other contexts. In (49), the indirective verb *kʰo* ‘give’ (§14.4.1) does not index
 3249 the recipient, whose only mark is the possessive prefix on *a-tçʰa* ‘news for me’.
 3250 Changing the prefix to the third singular *wu*- to refer to the subject here would be
 3251 ungrammatical (see however §2.8.5 and §24.2.5.2 on hybrid indirect speech).

- 3252 (49) *a-tcua kuu a-tc^ha muu-na-k^ho.*
 1SG.POSS-son ERG 1SG.POSS-news NEG-AOR:3→3'-give
 3253 ‘I have not heard from my son (My son did not give me any response).’

3254 However, in other constructions, there are no such constraints on the use of
 3255 possessive prefixes on *tuu-tçʰa* ‘news’(about someone): for instance, with the verb
 3256 *yut* ‘bring’ (§24.6.3.2) in (50), although the recipient is second person dual, *wu-tçʰa*
 3257 takes the 3SG prefix, coreferent with the preceding complement clause (using
 3258 second person singular *ny-tçʰa* here would be ungrammatical).

- 3259 (50) ‘ma-nu-tuu-yywu-ndzi tce azo tu-ce-a tce atu
 NEG-IMP-2-cry-DU LNK 1SG IPFV:UP-go-1SG LNK up
 3260 c-tu-t^he-a tce, ndzi-pa ndzi-ma ni
 TRAL-IPFV-ask[III]-1SG LNK 2DU.POSS-father 2DU.POSS-mother DU
 3261 u-pui-nuijbo-ndzi kui’ u-tc^ha pjuu-yuit-a
 QU-IPFV-scold-DU QU 3SG.POSS-information IPFV:DOWN-bring-1SG
 3262 ‘Don’t cry, I will go up there, ask whether your parents will scold you and
 3263 come back to tell you.’ (2003-kWBRa, 15)

3264 Alignment effects are also found with alienably possessed nouns. For instance,
 3265 the alienably possessed *skurma* ‘present’ can also optionally take a possessive
 3266 prefix, which is always coreferent with the recipient, not with the agent, as
 3267 shown by (51), where *nx-mu yuu u-skurma* means ‘a present (sent) to your mother’
 3268 and *a-skurma* can only mean ‘a present sent to me’ (from a text explaining the
 3269 meaning difference between *skurma*, *tx-pyro* and *tx-rkuz*).⁷

- 3270 (51) nx-mu yuu t^huci tu-rke-a tce
 2SG.POSS-mother GEN something IPFV-put.in[III]-1SG LNK
 3271 ju-tuu-tsum tce numuu nx-mu yuu u-skurma
 IPFV-2-take.away LNK DEM 2SG.POSS-mother GEN 3SG.POSS-present
 3272 ju-suu-yuit-a nyu nx-mu kui a-tx-rke
 IPFV-CAUS-bring-1SG be:FACT 2SG.POSS-mother ERG IRR-PFV-put.in[III]
 3273 tce, a-jy-tuu-yuit tce, tce numuu li a-skurma
 LNK IRR-PFV-2-bring LNK LNK DEM again 1SG.POSS-present
 3274 jy-ky-suuyuit nyu
 AOR-OBJ:PCP-CAUS-bring be:FACT
 3275 ‘When I prepare something for your mother and you take it to her, (I can
 3276 say) ‘I sent a present to you mother’, if your mother prepares something
 3277 and you bring it (to me), it is ‘a present sent to me.’ (def-skWrma, 18-19)

3278 Other inalienably possessed nouns of this type include *tuu-nja* ‘debt’ (§16.4.6,
 3279 used with the verbs *tso* ‘pay’, *tor* ‘come out’ and *sti* ‘stop up’), which select as pos-
 3280 sessor the person owing money (rather than the one to whom one owes money),
 3281 and *u-p^hup^huu* ‘alms’, whose possessor is the person receiving alms (example 76,
 3282 §19.4.1).

⁷Japhug has three words that can be translated as ‘present’: *tx-pyro* is used for presents one give to the recipient in person, *tx-rkuz* is a parting present one gives before a person leaves a place, and *skurma* is a present given with the help of a third party.

3283 5.1.3 Indefinite vs. generic possessor

3284 The generic possessive prefix *tu-* is formally identical to the indefinite possessor
 3285 prefix of some inalienably possessed nouns, but must be strictly distinguished
 3286 from it. Four criteria can be used to determine if a *tu-* prefix is generic, rather
 3287 than indefinite.

3288 First, the generic possessor prefix appears on alienably possessed nouns, as in
 3289 example (52) with *tu-kʰa* ‘one’s house’ and *tu-laxtɛʰa* ‘one’s things’, the generic
 3290 forms of *kʰa* ‘house’ and *laxtɛʰa* ‘thing’.

- 3291 (52) *tce abyndundyt zo ku-zo qhe w-qe ku-lst qʰe*
 LNK everywhere EMPH IPFV-land LNK 3SG.POSS-feces IPFV-throw LNK
 3292 *wuma zo tu-kʰa cʰo tu-laxtɛʰa ra*
 really EMPH GENR.POSS-house COMIT GENR.POSS-thing PL
 3293 *sui-nqʰi.*
 CAUS-be.dirty:FACT
 3294 ‘(Flies) land everywhere, shit and make one’s houses and things dirty.’ (25
 3295 akWzgumba, 59)

3296 Second, the generic *tu-* occurs on inalienably possessed nouns that normally
 3297 select the *tr-* indefinite possessor prefix, such as *tu-rjɪt* ‘one’s child’ and *tu-rpu*
 3298 ‘one’s maternal uncle’ in examples (53) and (54), by contrast with the citation
 3299 forms *tr-rjɪt* ‘child’ and *tr-rpu* ‘maternal uncle’.

- 3300 (53) *nua kuu-fse tce tuizo tuu-rjɪt kuuny za*
 DEM SBJ:PCP-be.like LNK GENR GENR.POSS-child also early
 3301 *my-sci tu-ti-nua*
 NEG-FACT:be.born IPFV-say-PL
 3302 ‘People say that in this way, one’s child will be born late.’ (27 qartshaz, 111)

- 3303 (54) *tuu-rpuw uu-rjɪt uu-cki tce tce “a-rpuw*
 GENR.POSS-uncle 3SG.POSS-offspring 3SG-DAT LNK LNK 1SG.POSS-uncle
 3304 *a-taꝝ” tu-kuu-ti nyu.*
 1SG.POSS-aunt IPFV-GENR-say be:FACT
 3305 ‘One has to say ‘my maternal uncle, my maternal aunt to one’s maternal
 3306 uncle’s sons and daughters.’ (140425 kWmdza01, 69)

3307 The use of the generic possessive *tu-rpu* ‘one’s maternal uncle’ in (54) can be
 3308 contrasted with the indefinite possessed form with *tr-* in example (55).

- 3309 (55) *nvzo t̪-rpui* *wi-r̪it* *a-pui-tui-ŋu, tce tce azo ku*
 2SG INDEF.POSS-uncle 3SG.POSS-offspring IRR-IPFV-2-be LNK LNK 1SG ERG
 3310 *'a-rpu'* *tu-ti-a* *kui-ra.*
 1SG.POSS-uncle IPFV-say-1SG SBJ:PCP-be.needed
 3311 'If you are the maternal uncle's son, (and I am the nephew) I have to say
 3312 'my uncle' (to you).' (hist140425 kWmdza, 114)

3313 Third, in the case of inalienably possessed nouns whose indefinite possessive is
 3314 *tui-*, such as *tui-mt̪čhi* 'mouth', the indefinite and generic forms are homophonous,
 3315 but are nevertheless distinguishable. In the case of a generic form the generic
 3316 pronoun *tuzo* 'one' (§6.2.1) can always be added as in (56).

- 3317 (56) *tuzo syz kui-mna,* *kui-ŋzuiχtso ra a-pui-ŋu ny, tuzo*
 3318 GENR COMP SBJ:PCP-be.better SBJ:PCP-be.clean PL IRR-IPFV-be LNK GENR
 3319 *tui-mt̪čhi manṭas nuatec pui-łor ŋu.*
 3320 GENR.POSS-mouth upper.side DEM:PL IPFV-come.out be:FACT
 'If (one uses the bowl of) someone who is cleaner than oneself, the
 (pimple) will appear on one's upper lip.' (25-khArWm, 11)

3321 Additionally, a generic noun such as *turme* 'person' can occur as possessor of
 3322 a noun with a generic possessive prefix as in (57). This usage is similar to that
 3323 found in other generic constructions.

- 3324 (57) *turme yui tui-ca* *wi-mdob tsa asui-ndo*
 3325 people GEN GENR.POSS-flesh 3SG.POSS-colour a.little PROG-take:FACT
 3326 *kui-fse*
 SBJ:PCP-be.like
 'It has a little the colour of human flesh.' (14-sWNgWJu, 97)

3327 Even when the generic pronoun or a generic noun is not present, it is possible
 3328 to identify generic possessors, as they are coreferent with the generic argument
 3329 indexed on the verb (by *kui-* for intransitive subject and object and the inverse
 3330 prefix *wyu-* for transitive subject, §14.3.2.5). For instance, in (58), we know that
 3331 the *tui-* prefixes in *tui-mt̪čhi* 'one's mouth' and *tui-čya* 'one's teeth' are generic
 3332 and not indefinite possessor because they refer to the same generic human as
 3333 the transitive subject of the verbs *pʰut* 'take out' and *ndza* 'eat' in the previous
 3334 clause, marked by the inverse prefix.

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- 3335 (58) *tce nút-wy-p^hut tce tú-wy-ndza ñgryl ri,*
LNK IPFV-INV-take.out LNK IPFV-INV-eat be.usually.the.case:FACT but
3336 *wuma zo tui-mtc^hi c^ho tui-cya ra*
really EMPH GENR.POSS-mouth COMIT GENR.POSS-tooth PL
3337 *jnu-suy-jnab ñju.*
IPFV-CAUS-be.black be:FACT
3338 ‘One can pluck it and eat it, but it causes one’s mouth and teeth to
3339 become black.’ (11-qarGW, 70)

3340 Fourth, possessed case markers such as the dative *u-cki* (§8.3.1) do not have
3341 indefinite possessive forms, and therefore if prefixed in *tui-*, it will always mark
3342 a generic possessor, as in (59) – such forms are often preceded by the generic
3343 pronoun *tuzo* ‘one’ anyway.

- 3344 (59) *ma tui-cki wuma zo zyy-suy-yrbat tce nündza*
LNK GENR-DAT really EMPH REFL-CAUS-be.near:FACT LNK for.this.reason
3345 *k^he tu-ti-nur jnu-ñju.*
stupid:FACT IPFV-say-PL SENS-be
3346 ‘It comes near humans a lot, so people call it ‘stupid’.’ (23-scuz, 62)

3347 5.1.3.1 The generic possessor as a first person marker

3348 As in the generic verbal forms (§14.6.1.4, §14.6.2), the generic possessive prefixes
3349 can be used as an indirect way to express first person singular or plural. In exam-
3350 ple (60) the generic as first person and the first person are used in two contiguous
3351 clauses, both referring to the narrator.

- 3352 (60) *tce tui-mu tui-wa ra tui-rkui*
LNK GENR.POSS-mother GENR.POSS-father RA NEG:SENS-stay-PL
3353 *múj-ryzi-nu tce, azo a-wi ci puu-tu.*
LNK 1SG 1SG.POSS-grandmother INDEF PST.IPFV-exist
3354 ‘My parents were not by my side, but I had a grandmother (to take care of
3355 me).’ (2010-09, 13)

3356 5.1.3.2 Comparative perspectives

3357 Indefinite and generic possessive dental stop prefixes are found in all Gyalrong
3358 languages (Sun 1998), but only indirect traces thereof exist in Khroskyabs (Lai
3359 2017: 155).

Outside of Gyalrongic, potential cognates of these prefixes include the ‘relational prefix’ *tə-* in Ao (Coupe 2007: 84–85, as first noticed by Wolfenden 1929: 141–142) and some *d-* or *g-* prefixes in body parts in Tibetan (see Jacques 2014d).

5.1.4 Prenominal modifiers

When prenominal modifiers occur with inalienably possessed noun, this head noun can either take a 3SG possessive prefix, or undergo alienabilization (§5.1.2.9).

Thus in (61) we find *χsyr tr-sno* ‘golden saddle’ with the indefinite possessor prefix *tr-*; *χsyr w-sno* with the 3SG possessive prefix is also attested in the same text. Neutralization of possessors of alienably possessed nouns is also attested in relative clauses (§23.3.4).

- (61) *χsyr tr-sno tʰa-nu-ta nu-ŋu*
 gold INDEF.POSS-saddle AOR:3→3'-put SENS-be
 ‘He harnessed the golden saddle (on the horse).’ (2003qachga, 111)

However, when the whole modifier+head noun complex is possessed, the possessor is rarely marked by a possessive prefix on the head noun; rather, the prefix occurs on the leftmost noun of the phrase, as in (62), where the 1SG prefix *a-* occurs on the modifier *χsyr* ‘gold’, and alienabilization of the head noun *tr-rte* ‘hat’ (compare with the form *a-rte* ‘my hat’ when no prenominal modifier is present).

- (62) *a-rte, a-χsyr tr-rte ra kumy nyzuy*
 1SG.POSS-hat 1SG.POSS-gold INDEF.POSS-hat PL also 2SG:GEN
nu-kʰam-a jyy
 IPFV-give[III]-1SG be.possible:FACT
 ‘I will even give you my hat, my golden hat.’ (140429 qingwa wangzi-zh, 54)

When the head noun is an alienably possessed noun, it is not usual either to strand the modifier and the following noun by putting a possessive prefix on the latter. The possessor is normally indicated by a possessive prefix on the leftmost word. For instance in (63) the 2SG prefix *ny-* occurs on the modifier *χsyr* ‘gold’.

- (63) *ny-χsyr kʰutsa nu-ra ku-kui-sui-ntcʰoz-a*
 2SG.POSS-gold bowl DEM:PL IPFV-2→1-CAUS-use-1SG
 ‘Let me use your golden bowl.’ (140429 qingwa wangzi-zh, 135)

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3387 However, we do find cases with a stranded NP modifier when the possessor
3388 on the head noun is first or second person, as in (64), where the prenominal mo-
3389 difier *χsyr* ‘gold’ does appear before the possessive prefix *a*.⁸ This construction,
3390 though rarer, is considered to be acceptable by native speakers. Other examples
3391 are found with unpossessible modifiers (§5.2.1).

- 3392 (64) *nunu a-kumtcʰuu*, *χsyr a-kumtcʰuu* *nunu kx-yut* *a-pui-tu-cʰa*
DEM 1SG.POSS-toy gold 1SG.POSS-toy DEM INF-bring IRR-IPFV-2-can
3393 *qʰe*,
LNK
3394 ‘If you can bring my toy, my golden toy back...’ (140429 qingwa
3395 wangzi-zh, 52)

3396 Note that unlike the inalienably and alienably possessed noun modifiers dis-
3397 cussed above, *pronominal* prenominal modifiers (§6.8) do not take possessive pre-
3398 fixes that have scope over the head noun. For instance, with the modifier *kumar*
3399 ‘other’, the possessive prefix must appear on the following noun, as second per-
3400 son *nx-* on *slama* ‘student’ in (65).

- 3401 (65) *kumar nx-slama* *ci tu-tu-ndym* *ju-tu-yut* *úr-ŋu*
other 2SG.POSS-student INDEF IPFV-2-take[III] IPFV-2-bring QU-be:FACT
3402 ‘So you are bringing other students of yours?’ (conversation, 150418)

3403 5.2 Unpossessible nouns

3404 In addition to inalienably and alienably possessed nouns seen in the previous sec-
3405 tions, Japhug also has a category of unpossessible nouns, which includes names
3406 of places and ethnic groups (as in Koyukon Athabaskan, Thompson 1996: 651),
3407 colour terms of Tibetan origin and some derived nouns like the ‘social relation
3408 collectives’ (§5.7.8.1). With the exception of colour terms (§5.2.2), these nouns can
3409 modify other nouns and are one of the three classes of ‘property words’ (corres-
3410 ponding to the adjectives of Standard Average European), alongside adjectival
3411 stative verbs (§2.2) and property nouns (§5.1.2.7).

3412 5.2.1 Place names

3413 Place names (*mbarkʰom* ‘Mbarkham’, *kymnyu* ‘Kamnyu’ etc) and names of ethnic
3414 groups (such as *kuruu* ‘Tibetan, Gyalrong’ or *kupa* ‘Chinese’), like personal names,

⁸The alternative form *a-χsyr kumtcʰuu* is possible to express the same meaning, and does occur in the same text.

³⁴¹⁵ cannot take possessive prefixes when used independently. They can only be used
³⁴¹⁶ with independent pronouns as in (66) or (72) below.

- ³⁴¹⁷ (66) *izora ji-p^he* *kympuu nutcu* <*xiaoxue*> <*yinianji*>
 1PL 1PL.POSS-DAT TOPO DEM:LOC primary.school first.grade
³⁴¹⁸ <*ernianji*> *pui-ndun-a*.
 second.grade AOR-read-1SG

³⁴¹⁹ ‘I studied the first and second grade of primary school at our place in
³⁴²⁰ Kamnyu.’ (140501 tshering skyid, 12)

³⁴²¹ These types of nouns can serve as strictly prenominal modifiers (as in *kuru*
³⁴²² *srtçʰa* ‘Tibetan areas’) and commonly occur as first member of nominal com-
³⁴²³ pounds (as in *kuruçymuydu* ‘traditional gun’, with *cymuydu* ‘gun’ as second
³⁴²⁴ element, see §5.5.1.1). Although these nouns are unpossessible by themselves,
³⁴²⁵ when used as first members of a compound, or even as prenominal modifiers
³⁴²⁶ (on which see §5.1.4), they can take a possessive prefix which has scope over the
³⁴²⁷ head noun, as in examples (67) and (68), where the 1PL possessive prefix *ji-* occurs
³⁴²⁸ prefixed on the name *kuruu* ‘Tibetan’ and on the place name *kympuu* ‘Kamnyu’.

- ³⁴²⁹ (67) *nutcu tce izora ji-kuruu-lysyr* *ŋu*
 DEM:LOC LNK 1PL 1PL.POSS-Tibetan-new.year be:FACT
³⁴³⁰ ‘At that time, it is our Tibetan new year.’ (conversation, 150102)

- ³⁴³¹ (68) *nyzo ji-kympuu-skyl* *nunuu* <*quanshijie*> *zo*
 2SG 1PL.POSS-pl.n.-language DEM whole.world EMPH
³⁴³² *ju-tu-su-xyzut* *ŋu*
 IPFV-2-CAUS-reach be:FACT
³⁴³³ ‘You are spreading our Kamnyu language to the whole world.’
³⁴³⁴ (conversation, 150618)

³⁴³⁵ The pair of examples in (69) and (71) illustrates the different behaviour of un-
³⁴³⁶ possessible nouns as first elements of compounds on the one hand, and as noun
³⁴³⁷ modifiers on the other. In (69), *kuruu-rmi* ‘Tibetan name’ constitutes a single com-
³⁴³⁸ pound noun (from *kuruu* ‘Tibetan’ and *tr-rmi* ‘name’; the phrase *kuruu u-rmi* is
³⁴³⁹ also possible).

- ³⁴⁴⁰ (69) *ny-kuruu-rmi*
 2SG:POSS-Tibetan-name
³⁴⁴¹ ‘Your Tibetan name.’

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- 3442 (70) *†kuruu ny-rmi*
Tibetan 2SG:POSS-name

3443 The possessive prefix occurs before *kuruu*. Stranding the modifier as in (70) is
3444 considered to be ungrammatical by native speakers.

- 3445 (71) *nyzuyy <faguo> ny-rmi*
2SG:GEN France 2SG.POSS-name
3446 ‘Your French name.’

3447 In (71) however, the modifier *faguo* ‘France, French’ (from Chinese) cannot be
3448 compounded with *ny-rmi* ‘name’ and cannot take possessive prefixes. This is a
3449 rare example where a noun modifier can be stranded from the stem of the head
3450 noun by a definite possessor prefix (§5.1.4).

3451 Place names followed by the plural *ra* designate the people living in the place
3452 (72), even without *-pu* suffixation (§5.7.6). Example (72) also shows that in this
3453 usage, it is possible to use a personal pronoun in apposition as in *izo kymnuu ra*
3454 ‘we Kamnyu people’.

- 3455 (72) *izo kymnuu ra kuu tc^hwuxpri tu-ti-j nyu rcaqo ra cho myŋi*
1PL TOPO PL ERG salamander IPFV-say-1PL be:FACT TOPO PL COMIT TOPO
3456 *ra kuu tc^hwuxpuwuxpri tu-ti-nuu nyu*
PL ERG salamander IPFV-say-PL be:FACT
3457 ‘We Kamnyu people call it *tc^hwuxpri*, and people from Rqakyo and Mangi
3458 call it *tc^hwuxpuwuxpri*’ (25-tChWXpri, 20)

3459 Place names can take some prenominal modifiers such as *p^ha* ‘whole’ as in (73),
3460 but no example of bare place names with prenominal demonstratives have been
3461 found.

- 3462 (73) *p^ha bduurjst nuu ui-ŋguu tce rqaco c^ho katca nuu stu*
whole TOPO DEM 3SG.POSS-inside LNK TOPO COMIT TOPO DEM most
3463 *yvndzo*
cold:FACT
3464 ‘In the whole of Gdongbrgyad, Rqakyo and Kacha are the coldest.’ (140522
3465 RdWtJAt, 104)

3466 Place names and ethnic names can be used as core arguments, or nominal
3467 predicates with a copula, as in (74) and (75).

3468 (74) *a-wa numu kupa ñu*

1SG.POSS-father DEM Chinese be:FACT

3469 ‘My father is Chinese.’ (140501 tshering skyid, 4)

3470 (75) *tce bñar-taþra nuna taþrdo ñu*

LNK two-household DEM TOPO be:FACT

3471 ‘These two households are Taqrdo.’

3472 Like locative relator nouns (§8.3.4), bare place names can be used without post-
 3473 position to express motion (76) or static location (77), but are also found with
 3474 locative postpositions, most often *ri* as in (78) but also *tce* or *zua* (as in 66 above).

3475 (76) *a-pi ku tý-wy-ndo-a tce tce, mbark^hom*

1SG.POSS-elder.sibling ERG AOR-INV-take-1SG LNK LNK TOPO

3476 *t^hú-wy-yut-a,*

AOR:DOWNTSTREAM-INV-bring-1SG

3477 ‘My elder brother brought me to Mbarkham.’ (140501 tshering skyid, 28)

3478 (77) *kucungu tce kympu yju kuænuz pjv-tu.*

former.days LNK TOPO watchtower seven IFR.IPFV-exist

3479 ‘In former times, there were seven watchtowers in Kamnyu.’ (140522 GJW,
 3480 1)

3481 (78) *tce alo ts^huβdun ri pu-ryzi-j tce*

LNK upstream TOPO LOC PST.IPFV-stay-1SG LNK

3482 ‘We were living up there in Tshobdun.’ (28-kWpAz, 178)

3483 Toponyms hardly ever occur as transitive subjects with ergative marking (§8.2.2.1).

3484 The only example in the corpus is (79), in the context of a mythological story as-
 3485 sociated with a cliff called *qaprñjar* in Kamnyu village.

3486 (79) *tce tuu-muu lyt tskha tce, qaprñjar*

LNK INDEF.POSS-weather release:FACT at.the.time LNK placename

3487 *wu-stu ri puu-kuu-ru tce zdum ci*

3SG.POSS-direction LOC IPFV:WEST-GENR:S/O-look LNK cloud INDEF

3488 *tu-nui-łob ñu. t^ham kurny zdum*

IPFV:UP-AUTO-come.out be:FACT now also cloud

3489 *tu-nui-łob ñu tce, nuu maka qaprñjar kuu zdum*

IPFV:UP-AUTO-come.out be:FACT LNK DEM at.all placename ERG cloud

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- 3490 *to-tcyr* *ra tu-ti-nur*
 IFR-take.out PL IPFV-say-PL
 3491 ‘And when it is about to rain, when one looks towards Qaprangar, a cloud
 3492 comes out from it. Even now a cloud comes out, and (the elders) say
 3493 ‘Qaprangar released a cloud.’ (140522 Kamnyu zgo, 328-330)

3494 5.2.2 Colour nouns

3495 Colour names of Tibetan origin, such as *ldzarku* ‘blue/green’ from རྩླྷ རྩླྷ *ldzaj.gu*
 3496 ‘green’, *bm̥yrmuy* ‘dark red’ from ད୍ଵାର୍ମୁ ད୍ଵାର୍ମୁ *dmar.smug* ‘dark red’ or *kʰatos* ‘varie-
 3497 gated’ from ຂ້າ.ດົກ *kʰa.dog* ‘colour, multicolour’ designate objects or animals with a
 3498 particular colour. To serve as predicates, they need an existential verb (80), like
 3499 participles of adjectival stative verbs of colour (81).

- 3500 (80) *u-muj* *nura wuma zo* *mpcyr*, *kʰatos* *zo*
 3SG.POSS-feather DEM:PL really EMPH be.beautiful variegated EMPH
 3501 *tu.*
 exist:FACT
 3502 ‘Its feathers are very beautiful and variegated.’ (24-kWmu, 68)
- 3503 (81) *qambalula rcanu* *u-mdor* *zakastaka zo* *kui-ŋu*
 butterfly UNEXP:DEG 3SG.POSS-colour each EMPH SBJ:PCP-be
 3504 *tu.* *kui-qarje* *tu,* *ldzarku* *tu,*
 exist:FACT SBJ:PCP-be.yellow exist:FACT blue/green exist:FACT
 3505 *kui-yrji* *tu,* *kui-ŋab* *tu.*
 SBJ:PCP-be.green exist:FACT SBJ:PCP-be.black exist:FACT
 3506 ‘There are butterflies with all kinds of colours, yellow, green, blue/green,
 3507 black. (26-qambalWla, 6)

3508 These nouns are only very rarely used as postnominal modifiers (§9.1.8.1); (82)
 3509 is such an example.

- 3510 (82) *ty-ri* *kʰatos* *nua kui tʰu-k̥-sui-βzu* *nua*
 INDEF.POSS-thread variegated DEM ERG AOR-OBJ:PCP-CAUS-make DEM
 3511 *snaljactʰyβ* *tu-kui-ti*
 multicolour.lace IPFV-GENR-say
 3512 ‘(The laces) that are made of multicoloured thread are called *snaljactʰyβ*.’
 3513 (30-rkAsnom, 38)

3514 The adjectival stative verbs in *aru-* derived from them (for instance *aruldžarjku*
 3515 ‘be green’, see §20.2.2) are as common as the colour nouns, and their participles
 3516 are generally used as noun modifiers instead of the colour nouns.

3517 5.2.3 Other unpossessible nouns

3518 Unpossessible nouns other than proper names and colour terms include nouns
 3519 occurring as postnominal modifiers like *tulyst* ‘second sibling’⁹ as in (83), and
 3520 privative nouns in *-lu* described in (§5.7.1).

- 3521 (83) *nuu-me* *tulyst* *nuu jv-mbi-nuu*
 3PL.POSS-daughter second.sibling DEM IFR-give-PL
 3522 ‘They gave him their second daughter.’ (2002 qaCpa, 40)

3523 Numerals under 99 are also unable to take possessive prefixes and serve as
 3524 postnominal modifiers (§7.1.1), and can be considered to be a subclass of unpos-
 3525 sible nouns.

3526 5.3 Personal names

3527 This section focuses on three topics: the absence of vocative forms, the Tibetan
 3528 origin of personal names, and their use with pronouns and possessive prefixes.

3529 5.3.1 Vocative

3530 Unlike other Gyalrong languages, Japhug does not have specific vocative forms
 3531 for personal names and kinship terms. In Tshobdun, Sun (1998: 133) and Sun
 3532 (2005: 53) reports that personal names in the vocative have stress retraction. The
 3533 same is found in Khroskyabs (Lai 2017: 153). In Situ, inalienably possessed nouns
 3534 have their possessive prefixes replaced by *a-* in vocative forms (Nagano 2003: 471,
 3535 Prins 2016: 177).

3536 In Japhug, due to the almost complete loss of contrastive stress (§3.7) and the
 3537 fact that the 1SG possessive prefix has the form *a-* (§5.1.1) unlike in Tshobdun and
 3538 Situ (where it is *ŋa-/ŋə-*), there is no specific vocative form for either personal
 3539 names or kinship terms.

3540 A prefix *a-* does occur in the familiar form of personal names (reminding of
 3541 Lin’s 1993: 162 description of this prefix as a 爱称 ‘pet name’ marker), but not

⁹In *tulyst* ‘second sibling’ the *tu-* element in this word is originally an indefinite possessor prefix, but has become lexicalized.

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3542 exclusively in vocative use as in example (84) where we see the name *acvβ* as
3543 transitive subject, familiar form of a Tibetan name with *scvβ* as second element
3544 (see §5.3.2 below).

- 3545 (84) *kui-lxy acvβ nuu kuu, ui-p^hunγuu nuutcu*
SBJ:PCP-graze Askyabs DEM ERG 3SG.POSS-fold.of.clothes DEM:LOC
3546 *qapuutum ci na-rku juu-ŋu,*
pebble.from.flint INDEF AOR:3→3'-put.in SENS-be
3547 ‘The shepherd Askyabs put a pebble in the folds of his clothes (to avoid
3548 forgetting what he had to told the king).’ (Kunbzang 332)

3549 Since similar *a*-prefixes exist in Tibetan and Chinese, and since personal names
3550 are exclusively borrowed from one of these languages (there are no clear rem-
3551 nants of native personal names in Japhug), it is likely that the familiar form of
3552 the names was also borrowed.

3553 5.3.2 Tibetan names

3554 Speakers of Japhug generally have Tibetan names (*kuruu u-rmi* or *kuruu-rmi*, §5.2.1),
3555 and in addition a Chinese official name which may or may not be related to the
3556 Tibetan one (see 69 §5.2.1 on the use of ethnic or countries names as prenominal
3557 modifiers with the inalienably possessed noun *ts-rmi* ‘name’). Buddhist or Bonpo
3558 monks are also given religious names (in Japhug *xpun u-rmi*, see 85).

- 3559 (85) *tce xpun ui-rmi nuu, azo a-rmi nuu stynbipima*
LNK monk 3SG.POSS-name DEM 1SG 1SG.POSS-name DEM ANTHR
3560 *ts-wy-syrmia-nuu.*
AOR-INV-give.name-1SG-PL
3561 ‘They gave me the name Bstanpa'i nyima as my monk name.’ (160721
3562 XpWN, 38)

3563 In one traditional story, we find an example of person names based on Japhug
3564 words as in (86), but it looks so strange that the narrator felt it necessary to
3565 specify that these are people’s names.

- 3566 (86) *zryntcuu turme ci pjx-tu, tupeci kuu-rmi ci*
mung.bean person INDEF IFR.IPFV-exist flax SBJ:PCP-call INDEF
3567 *pjx-tu, turme nuu-rmi juu-ŋu ny*
IFR.IPFV-exist people 3PL.POSS-name SENS-be SFP
3568 ‘There was (a lady) was was called ‘Mung bean’, and (another one) called
3569 ‘Flax’, these are names of people.’ (zrAntCW, 1)

Names used by Japhug speakers are not markedly different from those found in other Tibetan areas. Lady names often include the suffixes *ltṣym*, *rcit* or *mts^hu*, (from རྩྰ ‘lady, sister’, ས୍କୁ ‘happy’ and ພ୍ଚ ‘lake’), and there are also non-gender specific suffixes like *scvβ* (from ས୍କୁ ‘protector’, for instance *ts^huraj scvβ* from བୋ ས୍କୁ ‘p.n.’)).

Many Tibetan names have alternative readings reflecting different reading traditions belonging to more than two layers (see §3.3.3 and Jacques 2004: 83–200 on the layers of Tibetan borrowings in Japhug). For instance, some people with the Tibetan name ད୍ୡୱିର୍ମା ‘*p^hrin.las* ‘Karma’ are called *mp^hrulyz* (with preservation of the coda), other *mp^hruli* (with Amdo-type change to *-i*). The names however tend to have non-Amdo phonological features even for people of the younger generation. For instance, the name ཀୁନ୍ଦା ‘*kun.dga* ‘Ānanda’ is pronounced *kunga* without assimilation of the dental nasal to a velar nasal, and ཀୁନ୍ଦା ‘*kun.bzaj* ‘Sarvabhadra’ is *kunuβzaj* with an anaptyctic vowel (§4.2.3.1).

5.3.3 Alienably possessed or unpossessible nouns?

Personal names superficially look like unpossessible nouns, as they do not usually occur with possessive prefixes, even when taking placenames as modifiers, as in *taqrdo xpṛltcin* ‘Dpalcan from Taqrdo’ (see 92 in §5.3.4)

Personal names commonly occur preceded by kinship terms which, being inalienably possessed nouns (§5.1.2.4), have a possessive prefix as in (87).

- (87) *a-nmaš xpṛltcin*
1SG.POSS-husband ANTHR
'My husband Dpalcan.' (heard in context)

It is considered impolite to address someone from an older generation than oneself without adding a kinship term – for instance, the author of this grammar, being much younger, has to address the aforementioned Dpalcan as *a-βyo xpṛltcin* with the 1sg form of *tr-βyo* ‘father’s brother’.

Although personal names rarely occur with possessive prefixes, there is no grammatical constraint against it. There is one such example in the whole corpus, in a conversation where a clarification was needed. Tshendzin asks about Dpalcan, younger brother of Tshering Sgrolma, but she does not understand at once, because Tshendzin’s husband is also called Dpalcan; thus Tshendzin says (88c) with the possessed form *nu-xpṛltcin* ‘your_{pl} Dpalcan’ to disambiguate between the two.

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- 3603 (88) a. *χpyltcin kumab kui-nuahuji mur-jo-ce úr-ŋu.*
ANTHR other SBJ:PCP-do.work NEG-IFR-go QU-be:FACT
(Tshendzin): 'Dpalcan did not go for another job, did he?'
3604
3605 b. *ka?*
SFP
(Tshering Sgrolma): 'What?'
3606
3607 c. *χpyltcin, nuuzo nuu-χpyltcin nuu*
ANTHR 2PL 2PL.POSS-ANTHR DEM
(Tshendzin): 'Dpalcan, your Dpalcan.' (140510 tshering)
3608

3609 Given the existence of such forms, personal names are treated as a subclass
3610 of alienably possessed nouns rather than as unpossessible nouns. Note that only
3611 plural forms (*ji-χpyltcin* 'our Dpalcan', *zara nuu-χpyltcin* 'their Dpalcan' etc) are
3612 possible; singular forms such as *†a-χpyltcin* are not grammatical.

3613 5.3.4 Personal names and modifiers

3614 Proper nouns are more often than not used without demonstratives and deter-
3615 miners (see §9.1.4.4). However, examples of person or place names taking the
3616 postnominal distal determiners *nuu* or *nunu* (§9.1.2) are not rare (89 and 90))

- 3617 (89) *pimawozyr nuu kui, sruunmuu nuu pjy-ftul,*
ANTHR DEM ERG râkshasî DEM IFR-subdue
3618 'Nyima 'Odzer subdued the râkshasî.' (2011-4-smanmi, 258)
- 3619 (90) <*dangshi*> *χpyltcin numuu snarndi ly-ari*
at.that.time ANTHR DEM TOPO AOR:UPSTREAM-go[II]
3620 'At that time (the Wenchuan earthquake, in 2008), Dpalcan had gone to
3621 Snarndi.' (180420 wajW, 14)

3622 It is possible to use a dual or a plural marker on a personal name to designate a
3623 group of people sharing the same name, without any associative plural meaning,
3624 as in (91).

- 3625 (91) *a-puu-ŋu tce, χpyltcin bnuuz, nuu maŋ ny χsum*
IRR-IPFV-be LNK ANTHR two DEM not.be:FACT LNK three
3626 *kui-fse kui-naχtcuay tuturca a-puu-ryzi-nuu tce,*
NMZL:S/A-be.like NMZL:S/A-be.identical together IRR-IPFV-stay-PL LNK

3627 ‘χψyltcin ni, χψyltcin ra” nura tu-kui-ti *k^huu.*

ANTHR DU ANTHR PL DEM:PL IPFV-GENR-say be.possible:FACT

3628 ‘For instance, if two or three (people called) Dpalcan live together, one
3629 can say ‘the two Dpalcans’, ‘the Dpalcans’. (elicited)

3630 To distinguish between persons with the same name (a common occurrence
3631 among speakers of Japhug, given the relatively limited inventory of Tibetan
3632 names available), house names (*k^ha uu-rmi*) are generally added as prenominal
3633 modifiers, as in (92).

3634 (92) *χψyltcin uu-k^ha* *nua tabrdo rmi* *tce tabrdo χψyltcin*

ANTHR 3SG.POSS-house DEM TOPO be.called:FACT LNK TOPO ANTHR

3635 *tu-kui-ti.*

IPFV-GENR-say

3636 ‘Dpalcan’s house is called Taqrdo, so one (can) call him ‘Taqrdo Dpalcan’.
3637 (elicited)

3638 If two persons from the same household have the same name, locational mod-
3639 ifiers (§5.7.2) can be used instead, as illustrated in (93).

3640 (93) *nua mab* *ny, ndzi-k^ha* *uu-rmi* *kuny*

DEM not.be:FACT LNK 3DU.POSS-house 3SG.POSS-name also

3641 *a-pui-naxtcuy* *tce, k^ha kundi, lot^hi* *kui-fse*

IRR-IPFV-be.identical LNK house east.west up.down.stream SBJ:PCP-be.like

3642 *nura tce, maylo χψyltcin, mayt^hi χψyltcin, maykui χψyltcin,*

DEM:PL LNK upstream ANTHR downstream ANTHR east ANTHR

3643 *mayndi χψyltcin, nura tu-kui-ti ηgryl.*

west ANTHR DEM:PL IPFV-GENR-say be.usually.the.case:FACT

3644 ‘Otherwise, if their house name is also the same, using the east-west or

3645 the upstream-downstream dimensions, one can say ‘Dpalcan from

3646 upstream, downstream, east or west.’ (elicited)

3647 Like other nouns, personal names can also occur as head of non-restrictive rel-
3648 atives, as in (94) and (95), though such uses are rather uncommon. No examples
3649 of personal names as heads of head-internal relatives have been found.

3650 (94) *tcendyre icq^ha* *bilarsanjc^hin χsum ma*

LNK the.aforementioned Gesar three apart.from

3651 *muu-tx-kui-rzab* *nua,*

NEG-AOR-SBJ:PCP-pass.days DEM

3652 ‘Gesar, who was only three days old,’ (Gesar 81)

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- 3653 (95) *nua cuŋgu u-nmaɣ pua-kua-ŋu ts^huraŋ nua pjy-mto*
DEM before 3SG.POSS-husband PST-SBJ:PCP-be ANTHR DEM IFR-see
3654 ‘See saw Tshering, who had been her husband before.’ (2002qajdoskAt,

3655 5.4 Status constructus

3656 The term *status constructus* is used in Gyalrongic linguistics (Jacques 2012d, Lai
3657 2017: 163–164) to refer to the non-autonomous form of (mainly nominal, but also
3658 verbal and adverbial) roots occurring as non-final element of compounds. The
3659 use of this term, adopted from Semitic linguistics, differs from works such as
3660 Creissels (2006a) or Creissels (2017a) in which ‘construct form’ refers to a specific
3661 form that is obligatory on the head noun in specific noun-modifier constructions
3662 (including with a possessive marker).

3663 In Gyalrongic languages including Japhug, nominal compounds generally ex-
3664 hibit modifier-head order, which is the opposite of Semitic. Thus, the form under-
3665 going *status constructus* alternation in Japhug is often the modifier noun,¹⁰ except
3666 in Noun-Verb compounds where the second element is an adjectival stative verb.

3667 This section presents the various types of alternations attested for first or other
3668 non-final members of compounds, in particular vowel alternation (the most com-
3669 mon type). Additionally, exceptional changes to the final members of compounds
3670 are discussed in §5.4.3.

3671 5.4.1 Vowel alternations in non-final members of compounds

3672 Regular *status constructus* is Japhug applies to open syllables, following the cor-
3673 respondences in Table 5.4.

3674 Table 5.4 shows that vowels other than /i/ shift to /ɤ/, and /i/ to /ɯ/.

3675 In a few cases, /u/ can also alternate with /ɯ/, as in *ŋytɕu-* which occurs in
3676 the expression *ŋytɕukṛti + kʰu* ‘obey to everything’ (more details on this form are
3677 provided in §6.6.6), the *status constructus* of *ŋotɕu* ‘where’.

3678 The vowel /i/ also alternates with /ɤ/ in *status constructus*, as in *qapryftsa* ‘cen-
3679 tipede’ from *qapri* ‘snake’ and *tr-ftsa* ‘nephew’ or *tuu-mṛmṇaʂ* ‘astragalus’ from
3680 *tuu-mi* ‘leg, foot’ and *tuu-mṇaʂ* ‘eye’.

3681 Nouns ending in /-ɯ/ never have a *status constructus* form that is different
3682 from the base form, as for instance *tumuparʂ* ‘slug’ from *tuu-muu* ‘sky, rain’ and
3683 *parʂ* ‘pig’.

¹⁰In addition, in Japhug the possessed forms of nouns do not show morphological alternations (§5.1.1) with only one exception (§5.1.2.2).

Table 5.4: Regular *status constructus* in Japhug

Base	SC	Example
/-a/	/-ɤ/	<i>βyʂni</i> ‘mill axle’ from <i>βyʂ</i> ‘mill’ + <i>tʂ-sni</i> ‘heart’
/-e/	/-ɤ/	<i>tʂʰemʂpu</i> ‘little girl’ from <i>tʂʰeme</i> ‘girl’ + <i>u-pu</i> ‘little one’
/-o/	/-ɤ/	<i>mbrʂsno</i> ‘horse saddle’ from <i>mbro</i> ‘horse’ + <i>tʂ-sno</i> ‘saddle’
/-u/	/-ɤ/	<i>tʂ-kʂrmə</i> ‘head hair’ from <i>tʂ-ku</i> ‘head’ + <i>tʂ-rmə</i> ‘hair’
/-i/	/-ui/	<i>smuyot</i> ‘light of the fire’ from <i>smi</i> ‘fire’ + <i>yot</i> ‘light’

3684 Vowel alternation in closed syllables is very rare, and affects only a few stems
 3685 with /o/ as the main vowel (Table 5.5). The *status constructus* *çym-* of *çom* ‘iron’
 3686 occurs in a few other nouns, but the form *staʂ-* (with internal sandhi to *staχ-*, cf
 3687 §5.4.2.1) from *stor* ‘broad bean’ is unique.

Table 5.5: Irregular *status constructus* in closed syllable stems

Base	SC	Example
/-ob/	/-aʂ/	<i>staχpu</i> ‘pea’ from <i>stor</i> ‘broad bean’ + <i>u-pu</i> ‘little one’
/-om/	/-ɤm/	<i>çymtsʰoʂ</i> ‘iron nail’ from <i>çom</i> ‘iron’ + <i>tʂtsʰoʂ</i> ‘nail’

5.4.2 Other alternations

3688 Apart from the regular vowel changes described above, four types of alternations
 3689 are observed in non-final member of compounds: internal sandhi, coda loss, re-
 3690 duced forms and loss of the possessive prefix.
 3691

5.4.2.1 Internal sandhi in compounds

3692 First, the first element of a cluster undergoes internal sandhi (§4.2.3.1, §4.3), with
 3693 voicing and nasal assimilation as in Table 5.6.
 3694

3695 There are cases of irregular internal sandhi attested only in lexicalized com-
 3696 pounds. For instance *jajntʂyrpa* ‘one-handed axe’ from *tʂ-jaʂ* ‘arm, hand’, *u-ntsɪ*
 3697 ‘one of a pair’ and *tʂ-tpa* ‘axe’, showing a nasal assimilation rule /u/ → /ŋ/ /_[+nasal]
 3698 which is not productive in the language (as shown by words such *tʂ-jaʂndz* ‘fin-
 3699 ger’, also with *tʂ-jaʂ* ‘arm, hand’ as first element).

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Table 5.6: Internal sandhi in compounds

Type	Example	
Nasal assimilation	/t/ → /n/ /_[+nasal]	<i>tsʰynmu</i> ‘ewe’ from <i>tsʰyt</i> ‘goat’ + <i>mu</i> ‘female’
Voicing assimilation	/y/ → /x/ /_[-voiced]	<i>zruxpw</i> ‘little louse’ from <i>zruy</i> ‘louse’ + <i>w-pw</i> ‘little one’
	/b/ → /χ/ /_[-voiced]	<i>tu-jaxpa</i> ‘palm’ from <i>tu-jax</i> ‘arm, hand’ + <i>pa</i> ‘down’
	/z/ → /s/ /_[-voiced]	<i>mbrstsʰi</i> ‘rice soup’ from <i>mbryz</i> ‘rice’ + <i>tutsʰi</i> ‘rice soup’

3700 5.4.2.2 Loss of codas in compounds

3701 Coda loss is not a regular process in first elements of compounds. The following
 3702 is a list of some of the most representative examples.¹¹

- 3703 • Loss of /-β/:
 3704 *nqiaβ* ‘dark side of the mountain’ + *zwyr* ‘mugwort’ → *nqiazwyr* ‘Artemisia
 3705 sp.’
- 3706 • Loss of /-t/:
 3707 *xtut* ‘be short’ + *rjyi* ‘be long’ → *xturjyi* ‘length (n)’
 3708 *tsʰyt* ‘goat’ + *ta-bruu* ‘horn’ → *tsʰybruu* ‘goat horn’
- 3709 • Loss of /-z/:
 3710 *qartsʰaz* ‘deer’ + *tuu-ndzi* ‘skin’ → *qartsʰyndzi* ‘deer hide’
- 3711 • Loss of /-r/:
 3712 *zwyr* ‘mugwort’ + *wyrum* ‘be white’ → *zwryrum* ‘Artemisia sp.’
 3713 *çrr* ‘night’ + *w-χçrl* ‘middle’ → *çrχçrl* ‘middle of the night’
- 3714 • Loss of /-y/:
 3715 *txjmry* ‘mushroom’ + *-sti* ‘alone’ → *jmrysti* ‘species of mushroom’
 3716 *tuu-mtʰyy* ‘waist’ + *rŋgyp* ‘attach’ → *tuu-mtʰyngyŋp* ‘waistline of the trousers’
 3717 (where one can tuck things in)

¹¹Further examples can be found in numerals (see §7.2 and §7.3.1).

- 3718 • Loss of /-s/:

3719 *cos* ‘buckwheat’ + *wyrum* ‘be white’ → *cwyrum* ‘type of buckwheat’

3720 *pas* ‘pig’ + *tr-qa* ‘paw’ → *prqa* ‘stuffed pig feet’

3721 With the exception of the loss of *-t*, which is relatively common, the other cases
 3722 are rare and cannot be predicted by any rule based on phonology (the presence
 3723 of a cluster in the following element is irrelevant, for instance). Some of them
 3724 occur with other alternations in the second syllable (cf §5.4.3.2).

3725 5.4.2.3 Reduced forms

3726 A handful of nouns have reduced *status constructus* forms when occurring as the
 3727 first member of a compounds.

3728 The noun *nurja* ‘cow’ corresponds to the syllable *γr-* in the compounds *γrnu*
 3729 ‘udder’ (with *tuu-nu* ‘teat’ as second element), *γrqe* ‘cow dung’ (with *tuu-qe* ‘shit,
 3730 dung’) and *γrlitqazmbum* ‘dung beetle’ (on which see §5.4.3.2), which would be
 3731 the regular *status constructus* from a stem *γa-*. The apparent ‘loss’ of a *nu-* ele-
 3732 ment is due to the fact that the noun *nurja* ‘cow’ is itself an ancient compound
 3733 comprising *tuu-nu* ‘teat’ as first element (‘bovid with udders’).

3734 In the case of *kʰuna* ‘dog’, we find the *status constructus* *kʰu-* in the compounds
 3735 *kʰundzi* ‘dog skin’ (with *tuu-ndzi* ‘skin’ as second element), *kʰudo* ‘old dog’ (see
 3736 §5.7.5), *kʰutsʰos* ‘hunting with dog’ (probably a noun-verb compound with *tsʰos*
 3737 ‘attach’, see also the related incorporating verb in §20.13.1) and a few plant names
 3738 such as *kʰulu* ‘Euphorbia helioscopia’ (a possessive compound meaning ‘(the
 3739 plant) having dog milk’ – referring to its toxic juice, see §5.5.1.2) and *kʰurtsʰyz*
 3740 ‘Polygonum sp.’ (‘dog lung’; the second element is *tuu-rtsʰyz* ‘lung’). Unlike *nurja*
 3741 ‘cow’, whose reduced *status constructus* corresponds to the second syllable, the
 3742 syllable *kʰu-* corresponds to the first syllable of *kʰuna* ‘dog’, which must also be
 3743 an obscured compound. The etymology of the element *-na* is unclear.

3744 5.4.2.4 Loss of possessive prefix

3745 Some inalienably possessed or alienabilized nouns lose their possessive prefix
 3746 (or frozen indefinite possessive *tuu-/tr-*, see §5.1.2.10), as for instance the noun
 3747 *jmrtaꝝ* ‘weevil’, which comes from *tr-jme* ‘tail’ and *artax* ‘be forked’ (‘forked
 3748 tail’).¹² Its first element *tr-jme* ‘tail’ loses the prefix *tr-* and undergoes regular
 3749 vowel alternation.

¹²The verb *artax* ‘be forked’ itself is denominal from *tr-rtax* ‘branch’ (§20.2.1).

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3750 Similar examples are particularly common with *tu-xtsa* ‘shoe’, as mainly parts
3751 of the shoes are referred to by alienably possessed noun compounds with *xtsr-*
3752 as first element (*xtsrçna* ‘tip of the shoe’, *xtsyrkuu* ‘sides of the shoe’ etc).

3753 In some derivations that originate from compounds, such as the privative
3754 (§5.7.1) or the derogatory (§5.7.5), the indefinite possessor prefix is also removed.

3755 5.4.3 Final member of compounds

3756 Morphological changes affecting the last members of compounds are less com-
3757 mon than those on the first members. The only productive morphological alter-
3758 nation in this context is the loss of possessive prefix when the last member is an
3759 inalienably possessed noun.

3760 5.4.3.1 Loss of possessive prefix

3761 In compounds with an inalienably possessed noun as final element, the indefinite
3762 possessor prefix is lost as a rule, as in for example in the plant name *k^hunajme*
3763 ‘*Setaria viridis*’ from *k^huna* ‘dog’ and *tx-jme* ‘tail’.¹³

3764 Exceptions are very few. They include compounds whose second element is
3765 itself a compound, such as *lyndzitrlrts^has* ‘*Delphinium sp.*’ from *lyndzi* ‘ghost’ and
3766 *trlrts^has* ‘milk filter’; the second element is from *tx-lu* ‘milk’ in *status constructus*
3767 and *ts^has* ‘sieve’. In *lyndzitrlrts^has* ‘*Delphinium sp.*’, the indefinite possessor prefix
3768 *tx-* has become frozen when the compound *trlrts^has* ‘milk filter’ was formed, and
3769 is therefore not subject to deletion.

3770 Another exceptional example is *u-qata^hru* ‘hoof’ from *tx-qa* ‘paw’, ‘root’, ‘bot-
3771 tom’ and *ta-bruu* ‘horn’, perhaps because the second element was perceived as
3772 being alienabilized, meaning ‘the horn-like thing on the foot’; in alienabilized
3773 possessive forms, definite possessor prefixes are stacked onto the indefinite pos-
3774 sessive instead of replacing it, see §5.1.2.9).

3775 5.4.3.2 Alternations

3776 Morphophonological alternations affecting last members of compounds are very
3777 rare in Japhug.

3778 Internal sandhi influencing the second member of a compound rather than
3779 the first occur when a root ending in /-s/ is followed by a cluster with a velar

¹³The absence of the *status constructus* *k^huu-* is indicative in this case of a later loanword, perhaps calqued from Chinese 狗尾草 <gōuwěicǎo> ‘*Setaria viridis*’

fricative as first element. Thus, the incorporating verb *ampax̚tsʰum* ‘be petty’ is the denominal of a lost compound **m̚pax̚tsʰum* comprising *tuu-m̚paχ* ‘eye’ as first element and *xtsʰum* ‘be thin’: the combination of -χ- + *xtsʰ-* yields -χ̚tsʰ-.

Several cases of alternations in the last member are found with animal nouns with the uvular class prefix *qa-*, which has a variant /χ-/ /v-/ in this context in some compounds (see §5.6.1 and §5.6.4).

Other alternations are restricted to specific lexical items, which are discussed below one by one (*rŋgyβ* ‘attach’, *yurni* ‘be red’, *t̚su* ‘path’ and *tuu-yli* ‘excrement, dung’).

The inalienably possessed noun *tuu-mtʰyrNGyβ* ‘part of the trouser where one can tuck things in’ (a noun whose meaning is better explained by an example sentence like 96) is a compound of the noun *tuu-mtʰsy* ‘waist’ with the transitive verb *rŋgyβ* ‘attach’, which appears as a uvularized allomorph -*rNGyβ* not attested elsewhere: it is unclear why uvularization took place in this word (dissimilation with the coda /-y/ of the previous root is unlikely).

- (96) *tsʰi* *tx-mda* *tce nuu uzo ui-cʰymd̚yru* *nua*
 drink:FACT AOR-be.the.time LNK DEM 3SG 3SG.POSS-drinking.straw DEM
pjui-nuu-rve *tce pjui-nuu-tsʰi*,
 IPFV:DOWN-AUTO-insert LNK IPFV:DOWN-AUTO-drink
muu-na-tsʰi *tce tce li tu-nuu-χeoB* *tce*
 NEG-AOR:3→3'-drink LNK LNK again IPFV:UP-AUTO-take.out LNK
u-ktʰyrNGyβ cʰui-nuu-rve
 3SG.POSS-tuck IPFV:DOWNSTREAM-AUTO-insert
 ‘When it is time to drink, he inserts his straw (into the jar) and drinks
 from it, and when he does not drink any more, he takes it out and tucks it
 back into his trousers.’ (30-tChorzi, 45)

The noun *ft̚vru* ‘path in the middle of the fields’ is a compound of *ft̚car* ‘summer’ and *t̚su* ‘path’ (such paths are made during summer to allow workers to work in the field without damaging the crops, see a definition in 87 in §16.1.3.6). The first element *ft̚v-* is the *status constructus* of *ft̚car* (with loss of final consonant) and the form -*ru* for the second member of the compound is a clue that *t̚su* comes from earlier **t-ro* with a dental stop+/r/ cluster changing to a retroflex affricate (see §4.2.2.4 and §7.1.3) – the **t-* element being prefixal (perhaps a fossilized indefinite possessor prefix).

The noun *jmr̚nyi* ‘russula’ clearly derives from *txjm̚ry* ‘mushroom’ and *yurni* ‘be red’, but while the loss of the *tx-* prefix can be explained (see §5.1.2.10), the form of the second element (without *r-* preinitial) is a mystery. The form -*rni*

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(without *yuu-*, a prefix possibly of denominal origin, §20.5.1) is found in *qrorni* ‘red ant’ with *qro* ‘ant’ as first element (a late innovation specific to the Kamnyu dialect).

The compound *yrilitcaəmbum* ‘dung beetle’, with the irregular *status constructus* *yr-* (see §5.4.2.3) of the noun *nurja* ‘cow’, contains a syllable *-li* clearly derived from the inalienably possessed noun *tu-yli* ‘excrement, dung’.¹⁴

The examples above show that most of the forms with an irregular second member also present some irregularity in the first member of the compound.

5.5 Compound nouns

Nominal compounds in Japhug can be build by compounding nouns, but also verbs, adverbs and ideophones. In this section, compounds are first classified by the part of speech of their elements, and then by the semantic relationship between these elements.

5.5.1 Noun-Noun compounds

Noun-Noun compounds can be divided in three classes: Determinative, possessive and coordinative compounds.

5.5.1.1 Determinative compounds

In determinative (or endocentric) compounds, the two elements either have a genitival or an attributive relationship.¹⁵ Modifier-Head order is by far the most common, but Head-Modifier is found in some compounds based on postnominal modifiers.

While genitive phrases are followed by a noun with a third person possessive prefix (§8.2.3.1), in the corresponding compounds the possessive prefix is deleted (except the indefinite possessor prefix in exceptional examples, see §5.4.3.1).

In this type of compounds, the first element is most commonly in *status constructus* if from a word ending in open syllable, both for highly lexicalized compounds *qaçpyrnob* ‘wild strawberry’ (‘frog’s brain’, from *qaçpa* ‘frog’ and *tu-rnob* ‘brain’) and more transparent ones (*jlsndzi* ‘hybrid yak hide’ from *jla* ‘hybrid yak’ and *tu-ndzi* ‘skin’).

¹⁴The second part of the noun *-tcaəmbum* contains *aəmbum* ‘be concave’.

¹⁵I use this term to encompass both the traditional notions of *karmadhāraya-* and *tatpuruṣa-*: since pre-nominal modifiers are not easily distinguishable from possessors, this distinction would not be practical.

3842 Among determinative compounds, we commonly find nouns denoting locations
 3843 and places or ethnic names such as *kuru* ‘Tibetan’ and *kupa* ‘Chinese’ (as in
 3844 *kupanya* ‘Chinese-style clothes’ or *kupastaxpu* ‘soja’ (with *staxpu* ‘pea’, on which
 3845 see §5.4.1).

3846 Some compounds comprise elements that are themselves compounds. For instance,
 3847 the first element *sungu* ‘forest’ in *sungurm̥βja* ‘lophophorus’ (with *r̥m̥βja*
 3848 ‘peacock’) and *sungupryjka* ‘type wild squash’ (with *pryjka* ‘squash’) is a compound
 3849 from *si* ‘tree’ and *u-ŋgu* ‘inside’, and its original meaning was presumably ‘among
 3850 the trees’.¹⁶

3851 Compounds also exist with specific placenames such as *tčʰitčun* ‘Jinchuan’, for
 3852 instance in *tčʰitčunpaxci* ‘pear’ (with *paxci* ‘apple’ as second element), a noun
 3853 which can undergo denominal derivation to *nutčʰitčunpaxci* ‘pick pears’ (§20.1.2),
 3854 showing that the place name modifier has been integrated.¹⁷

3855 In addition to nouns, participles also occur in determinative compounds. They
 3856 are found both as first or second element of the compound, and both subject
 3857 participles in *kuu-* (§16.1.1.7) and oblique participles in *sy-* (§16.1.3.10) are attested.

3858 For instance, the compound *tç̥syng̥t* ‘crossroad’ combines the *status construc-*
 3859 *t̥su* ‘path’ and the oblique participle *u-sy-nc̥t* ‘place where X part ways’
 3860 from *nung̥t* ‘part ways’.¹⁸ The obsolete noun *srqyrch̥a* ‘alcohol offered to one’s
 3861 guests’, comprises the oblique participle *u-sy-qru* of the verb *qru* ‘greet, welcome,
 3862 receive’ and the noun *c̥a* ‘alcohol’ (see other examples in §16.1.3.10).

3863 Compounds with the participle of a transitive verb as their second element
 3864 do not necessarily derive from a genitival construction, though they might be
 3865 superficially similar to compounds of this type. For instance *qalekutsʰi* ‘species
 3866 of kite’ comes from *qale* ‘wind’ and the participle *u-kuu-tsʰi* ‘blocking (it)’ (§16.1.1)
 3867 of the transitive verb *tsʰi* ‘block’; the phrase *qale u-kuu-tsʰi* (wind 3SG.POSS-SBJ:PCP-
 3868 block) ‘blocking the wind’ is more properly a headless participial relative (§23.4.1,
 3869 §16.1.1.7), and is more similar to Object-Verb compounds (§5.5.5.2).

3870 Only a handful of Head-Modifier determinative compounds are attested. Most
 3871 of these are the lexicalized versions of nouns followed by post-nominal modifiers
 3872 (§5.2). A good example of such compounds is provided by *zmbruksyru* ‘willow that
 3873 does not grow high’ from *zm̥bri* ‘willow’ and the privative form *krlu* ‘headless’
 3874 (§5.7.1) of *tu-ku* ‘head’), a name explained in (97).

¹⁶The noun *sungu* ‘forest’ is better translated as ‘wild’ when occurring as prenominal modifier or first member of compounds.

¹⁷I am indebted to Gong Xun for this observation.

¹⁸This intransitive verb itself is the anticausative of *qyt* ‘separate’, with an additional *nu-* prefix, §18.5.1.2.

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- 3875 (97) *wi-tab wi-mnu* *kuny kur-zri* *tu-tob*
 3SG-on 3SG.POSS-new.twig also SBJ:PCP-be.long IPFV:UP-come.out
 3876 *múj-cʰa* *tce, nu-ky-ndzyr zo jnu-fse tce nu*
 NEG:SENS-can LNK AOR-OBJ:PCP-cut EMPH SENS-be.like LNK DEM
 3877 *zmbrukslu tu-kui-ti* *ŋu. tce nuu wi-ku*
 plant.name IPFV-GENR-say be:FACT LNK DEM 3SG.POSS-head
 3878 *kui-me ky-ti jnu-ŋu. kslu nuu wi-ku*
 SBJ:PCP-not.exist INF-say SENS-be headless DEM 3SG.POSS-head
 3879 *kui-me ky-ti jnu-ŋu.*
 SBJ:PCP-not.exist INF-say SENS-be
 3880 ‘Its new twigs cannot grow very long, and look like they have been
 3881 sawed short, therefore it is called ‘headless willow’. ‘Headless’ means
 3882 ‘without head’’ (07-Zmbri, 34-36)

3883 The counted noun *tu-pyrme* ‘one year of life’ attests a different type of Head-
 3884 Modifier determinative compound. It comes from *tu-xpa* ‘one year’ and *turme*
 3885 ‘man’ (see §7.3.1.7 on the alternation between *-xpa* and *-pyr-*, and §5.1.2.10 on the *tu-*
 3886 prefix in ‘man’), and originally meant ‘man’s year (of life)’. Despite this meaning,
 3887 the modifier ‘man’ appears as the second element. Unlike ‘headless willows’ (97),
 3888 in this case the modifier would not be postnominal in the corresponding noun
 3889 phrase.

3890 5.5.1.2 Possessive compounds

3891 Possessive (or exocentric) compounds (*bahuṛīhi-*) are uncommon in Japhug, and
 3892 tend to be synchronically obscure. All known examples appear to have Modifier-
 3893 Head order, and are plant names.

3894 The name *kʰwulu* ‘*Euphorbia helioscopia*’ combines the reduced *status construc-*
 3895 *tus* of *kʰuna* ‘dog’ (§5.4.2.3) with *tr-lu* ‘milk’. It presumably means ‘(having) dog
 3896 milk’, a reference to a whitish toxic liquid that comes from it (98).

- 3897 (98) *tce nuu kʰwulu* *nunu syndyy.* *wi-lu*
 LNK DEM Euphorbia.helioscopia DEM poisonous:FACT 3SG.POSS-milk
 3898 *tu tce, tr-lu kui-fse kui-wyrū~wyrum*
 exist:FACT LNK INDEF.POSS-milk SBJ:PCP-be.like SBJ:PCP-EMPH~be.white
 3899 *ŋu. koŋla zo, pjáu-wy-qluit tce, nure wi-lu*
 be:FACT completely EMPH IPFV-INV-break LNK there 3SG.POSS-milk

3900 *tu.*

exist:FACT

3901 ‘The *Euphorbia helioscopia* is toxic, it has a juice white like milk, when it
3902 is broken, there is milk in (the stalk). (19-khWlu, 20-22)3903 Another plant name, *qaprimdzu* ‘*Cicerbita roborskii*’, from *qapri* ‘snake’ and
3904 *tu-mdzu* ‘tongue’ is interpretable as a possessive compound ‘(having) a snake’s
3905 tongue’, referring to the shape of its leaves (99).3906 (99) *w-jwas nura qapri w-mdzu w-tshuya nu*
3SG.POSS-leaf DEM:PL snake 3SG.POSS-tongue 3SG.POSS-shape DEM
3907 *fse*
be.like:FACT

3908 ‘The shape of its leaves look like that of a snake tongue.’ (xsArW, 73)

3909 The compound *kunguttrtsyy* ‘*Leonurus*’, from the numeral *kungut* ‘nine’ and
3910 the noun *tr-rtsyy* ‘stairs’, can be analyzed as meaning ‘(plant having) nine stairs’,
3911 referring to the nodes on the stalk of this plant. The Numeral-Noun order in this
3912 compound is remarkable, since numeral normally follow the noun (see §7.1.7,
3913 §9.3) but similar to some quantifiers (§9.1.3). The same Numeral-Noun order is
3914 found in the more complex compound *kunguttrq^hngas* ‘*Lonicera sp.*’ discussed
3915 in §5.5.5.3916

5.5.1.3 Coordinative compound

3917 Coordinative compounds are uncommon in Japhug, and are formally indistin-
3918 guishable from the previous classes. In this type of compounds, both elements
3919 are heads.3920 This class includes the traditional traditional *dvandva-*, which are semantically
3921 intrinsically collectives, for instance *c^hymt^hum* ‘food and drinks’ from *c^ha* ‘alco-
3922 hol’ and *tr-mt^hum* ‘meat’, *sjiçyr* ‘night and day’ from *tu-sji* ‘one day’ and *çyr*
3923 ‘night’ and *xc^hoze* ‘right and left’ from *xc^ha* ‘right’ and *ze* ‘left’, the latter two
3924 being mainly used as adverbs.3925 An even rarer type of coordinative compound are the appositive compounds,
3926 the only clear example of which is *kurjukuyndzur* ‘harvestman’, a noun built
3927 from two subject participles, from the transitive verbs *rju* ‘parch’ and *yndzur*
3928 ‘grind’. The two elements of the compound refer to the actions supposedly per-
3929 formed by that type of chelicerate (‘the parcher-grinder’) like the participial form
3930 of a bipartite verb (§11.6.3).

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3931 The compound *qajusmynba* ‘leech’, from *qaju* ‘bug’ and *smynba* ‘doctor’, is pos-
3932 sibly interpretable as an appositive compound ‘bug acting as a doctor’ or ‘doctor
3933 who is a bug’, since its meaning is clearly not ‘doctor treating bugs’.

3934 5.5.2 Verb-Verb compounds

3935 There are two types of Verb-Verb nominal compounds in Japhug, action nomi-
3936 nals (involving transitive action verbs) and degree nouns (with adjectival stative
3937 verbs).

3938 5.5.2.1 Action nominals

3939 Action nominals built from two verb roots are not common in Japhug. Some
3940 of these action nominals are made from verbs with complementary or near-
3941 identical meanings, for instance *joβbzur* ‘tidying up’ from *joβ* ‘raise’ and *βzur*
3942 ‘move’. This noun occurs in a light verb construction as in (100). The denominal
3943 compound verb *rjjoβbzur* ‘tidy up’ has a meaning verb close to this construction
3944 (§20.12).

- 3945 (100) *joβbzur* *ty-βzu-t-a*
 tidying.up AOR-do-PST:TR-1SG
3946 ‘I did some tidying up.’ (elicited)

3947 Another type of verb-verb action nominals are made from verbs with opposite
3948 meanings, for instance *βsynyo* ‘winning and losing’ from *βya* ‘win’ and *nyo* ‘lose’,
3949 which is used with existential verbs as in (101).¹⁹

- 3950 (101) *βsynyo* *maye-ndzi*
 winning.and.losing not.exist:SENS-DU
3951 ‘One cannot decide who (of the two of them) is winning and who is
3952 losing.’

3953 At an earlier stage, such compound action nominals may have been common,
3954 as is suggested by the existence of denominal compound verbs without a corres-
3955 ponding noun, such as *raxtutsye* ‘do commerce’ (from *χtua* ‘buy’ and *ntsye* ‘sell’,
3956 §20.7.2 on the *-n*- element).

¹⁹ A similar compound *fqb-nyjt* with identical meaning is found in Tshobdun (Sun & Blogros 2019: 295).

3957 5.5.2.2 Nouns of dimension

3958 The productive way of building degree nouns in Japhug is by adding the prefix
 3959 *tū-* to an adjectival stative verb (§16.3), but an alternative formation involves the
 3960 compounding of two antonymic verbs or location adverbs, such as *jpumxts^hum*
 3961 ‘thickness’ from *jpum* ‘be thick’ and *xts^hum* ‘be thin’. All known examples are
 3962 listed in Table 5.7 (note that whenever possible, the first member of these com-
 3963 pounds is in *status constructus*).

Table 5.7: Nouns of dimension

Compound	First verb	Second verb
<i>jpumxts^hum</i> ‘thickness’ (diameter)	<i>jpum</i> ‘be thick’	<i>xts^hum</i> ‘be thin’
<i>ja^hmba</i> ‘thickness’ (of a sheet)	<i>ja^hs</i> ‘be thick’	<i>mba</i> ‘be thin’
<i>xturjy^hi</i> ‘length’	<i>xtut</i> ‘be short’	<i>rjy^hi</i> ‘be long’
<i>xt^huuxte</i> ‘size’	<i>xt^he</i> ‘be small’	<i>wxti</i> ‘be big’

3964 In the case of *xt^huuxte* ‘size’, the second element *xte* is a variant also found
 3965 in the derived verb *muxte* ‘be the majority’, probably the relic of a former **i/e*
 3966 alternation still observed in the verb *yi* ‘come’ (§12.2.1.1).

3967 Locational adverbs/nouns can also be compounded to express the three spatial
 3968 dimensions encoded by verbal morphology and locative markers (§15.1.3, §22.2.6):
 3969 *tar^hki* ‘up and down’ from *tar* ‘up’ and *aki* ‘down’, *lot^hi* ‘upstream and downstream’
 3970 from *lo* ‘upstream’ and *t^hi* ‘downstream’ and *kundi* ‘east-west’ from *kui* ‘east’ and
 3971 *ndi* ‘west’. An example of the use of these nouns can be found in (93), §5.3.4 above.

3972 Nouns of dimension can further derive denominal verbs in *a-* meaning ‘of un-
 3973 equal X’ (§20.2.1).

3974 5.5.3 Noun-Ideophone compounds

3975 Nominal compounds comprising an ideophone (§10.1.1) are rare. Three examples
 3976 are attested.

3977 First, the noun *mciru^hruuβ* ‘person whose saliva drips continuously’ is built
 3978 from the inalienably possessed *tū-mci* ‘saliva’ (§5.6.5) and the reduplicated ideo-
 3979 phonic root |*ruβ|*, found in the pattern III form (§10.1.2.3) *ruβn^hruuβ* meaning
 3980 ‘dripping (drop by drop) continuously’ (§10.1.4) and the deideophonic verb *yr-*
 3981 *ruβruuβ* ‘drip continuously’. The collocation of *tū-mci* with both the ideophone
 3982 and its derived verb is commonly attested (see example 62, §21.3.2.3).

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3983 Second, the bird name *ja流氓zdoždor* contains the *status constructus* form of *tua-*
3984 *jažmu* ‘thumb’ and the pattern II ideophone *zdoždor* meaning ‘small and active’.

3985 Third, the name of the mushroom *salabojboj* ‘puffball’ contains the pattern II
3986 ideophone *bojboj* ‘ovoid’. The first part of this word is obscure.

3987 5.5.4 Adverb-Verb compounds

3988 Adverb-Verb compounds are relative marginal. Compounds with *kuzya* ‘a long
3989 time; many times’ in *status constructus* *kuzyr-* followed by a verb are however
3990 attested, as *kuzyr-çar* ‘searching for a long time’ from the verb *çar* ‘search’ in
3991 (102). These compounds are studied in more detail in §16.4.7 (see also Jacques
3992 2016a: 252).

- 3993 (102) *kur-xtci* *nui yuu pjy-me* *tce, tçendyre rca*
 SBJ:PCP-be.small DEM GEN IFR.IPFV-not.exist LNK LNK UNEXP:DEG
3994 *kuzyr-car* *zo jy-βzu-nui ri pjy-me.*
 long.time-search EMPH IFR-do-PL LNK IFR.IPFV-not.exist
3995 ‘The (pigeon skin) of the youngest girl was not there, there looked for it
3996 for a long time but it was not there.’ (the flood 2002, 55)

3997 5.5.5 Noun-Verb compounds

3998 Noun-Verb compounds include three main types, Subject-Verb, Object-Verb and
3999 Adjunct-Verb compounds. Participles or other nominalized verbs forms are trea-
4000 tered in sections 5.5.1, but criteria to distinguish between ambiguous forms in cases
4001 of homophony between noun and verb are provided in §5.5.2.

4002 5.5.5.1 Subject-Verb compounds

4003 Subject-Verb compounds occur exclusively with intransitive verbs, mainly ad-
4004 jectival stative verbs. The noun is generally in *status constructus* (see Table 5.8
4005 below). Based on their semantics, there three of subject-verb compounds can be
4006 distinguished: attributive, possessive and action nominals.

4007 Attributive Subject-verb compounds are equivalent to a relative clause com-
4008 prising a stative verb and its subject (§9.1.8.3, §16.1.1.4). If the nominal and verbal
4009 elements are represented as *N* and *V*, an attributive *NV* compound means ‘*N*
4010 which is *V*’. They are common with stative verbs of colour such as *nar* ‘be black’
4011 or *wyrum* ‘be white’ as in Table 5.8.

Table 5.8: Examples of attributive Subject-Verb compound nouns

Compound	Base Noun	Verb
<i>t̥r̥çyŋas</i> ‘black barley’	<i>t̥r̥ci</i> ‘barley’	<i>ŋas</i> ‘be black’
<i>t̥r̥çyŋrum</i> ‘white barley’		<i>wyrum</i> ‘be white’
<i>mts^halvŋas</i> ‘black nettle’	<i>mts^halu</i> ‘nettle’	<i>ŋas</i> ‘be black’
<i>mts^halvŋrum</i> ‘white nettle’		<i>wyrum</i> ‘be white’
<i>qartsuŋas</i> ‘cold winter’	<i>qartsuu</i> ‘winter’	<i>ŋas</i> ‘be black’
<i>p̥yŋas</i> ‘Pucrasia macrolopha’	<i>p̥ya</i> ‘bird’	
<i>t̥r̥mtuŋas</i> ‘deadlock’		<i>t̥r̥-mtu</i> ‘knot’

4012 The compounds in Table 5.8 are highly lexicalized; in the case for instance of
 4013 *p̥yŋas* ‘Pucrasia macrolopha’, this bird is not even black as the speakers them-
 4014 selves point out (103).

- 4015 (103) *p̥yŋas* *ky-ti* *ci* *tu* *tce, nuiŋuu vo*
 Pucrasia.macrolopha OBJ:PCP-say INDEF exist:FACT LNK DEM ADVERS
 4016 *lusiŋki* *li* *nui p̥ya ſu,* *tceri m̥-ŋas* *ma*
 of.course again DEM bird be:FACT but NEG-be.black:FACT LNK
 4017 *nui-mp̥cyr.* *wi-muj* *nura wuma zo*
 SENS-be.beautiful 3SG.POSS-feather DEM:PL really EMPH
 4018 *nui-mp̥cyr* *q^he kui-tu* *ra nui-nymbju* *zo*
 SENS-be.beautiful LNK SBJ:PCP-exist PL SENS-be.brilliant EMPH
 4019 ‘The *Pucrasia macrolopha* is of course also a bird (like the previous ones
 4020 we talked about), but it is not black, it is beautiful, its feathers are very
 4021 beautiful and those that are there (visible) are iridescent.’

4022 More complex NV compounds of this type are found, such as *tuu-jazndzumŋpa-*
 4023 *χcyl* ‘middle finger’ from *tuu-jazndzu* ‘finger’ and *m̥paxχcyl* ‘be in the middle’ (itself
 4024 a denominal verb from *wi-χcyl* ‘middle’).

4025 In such compounds, some stative verbs occur with a -x- element in individual
 4026 forms. This is the case of *t̥lyxc^hi* ‘fresh milk’ from *t̥r̥-lu* ‘milk’ and *c^hi* ‘be sweet’. It
 4027 is possible that this velar fricative represents the remnant of a participle prefix *kui-*
 4028 . This -x- is however present in the causative (§17.2.1.4) and the tropative (*n̥yxc^hi*
 4029 ‘to find sweet’, §17.5.1) derivations.

4030 Possessive NV compounds are equivalent to a participial relative with the pos-
 4031 sessor of the subject as the relativized element (§23.5.10): In other words, a posses-

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4032 sive NV means ‘(person/animal/entity) whose N is V’. Examples are considerably
 4033 fewer than the previous ones.

4034 Table 5.9 illustrates a few Noun-Verb compounds based on the verb *aχa* ‘have
 4035 a hole, have a chip’, which surfaces as -χa with elision of the a- prefix.²⁰ Among
 4036 these examples, *cyrχa* ‘person lacking a tooth’ and *rnyftcwaχa* ‘whose ear has ten
 4037 holes’²¹ are possessive compounds, while *tsyχa* ‘chuckhole’ and *tui-javmryχa* (虎
 4038 □ <hüköu> ‘space between thumb and index’ are possessive compounds.

Table 5.9: Possessive compound nouns in -χa, derived from the verb
aχa ‘have a hole, have a chip’

Compound noun	First element
<i>cyrχa</i> ‘person lacking a tooth’	<i>cyr-</i> ← <i>tui-cya</i> ‘tooth’
<i>rnyftcwaχa</i> ‘whose ear has ten holes’	<i>rny-</i> ← <i>tui-rna</i> ‘ear’ <i>ftcwa-</i> ← Tib. རྙྙ བ୍ର୍ତ୍ତୁ ‘ten’
<i>tsyχa</i> ‘chuckhole’	<i>tsy-</i> ← <i>tsu</i> ‘path’
<i>tui-javmryχa</i> ‘space between thumb and index’	<i>tui-javmry-</i> ← <i>tui-javmu</i> ‘thumb’

4039 A particularly interesting Noun-Verb possessive compound is the plant name
 4040 *kunguttyrqʰyNGaʂ* ‘Lonicera sp.’, which comprises three elements: the numeral
 4041 *kungut* ‘nine’, the inalienably possessed noun *tr-rqʰu* ‘skin, hull’ and the intransitive
 4042 verb *NGaʂ* ‘peel, shed skin’ (anticausative of *qaʂ* ‘peel’, see §18.5.1). This
 4043 compound is to be parsed [*kungut-tyrqʰy-*] [*NGaʂ*] from a morphological point
 4044 of view, as its meaning is ‘(plant) whose nine skins shed off’ as is explained in
 4045 the text excerpt in (104): the first element *kungut-tyrqʰy-*²² corresponds to the
 4046 intransitive subject of *NGaʂ* ‘peel, shed skin’.

(104)	<i>kunguttyrqʰyNGaʂ</i>	<i>ui-rmi</i>	<i>kura</i>	<i>nunui tcendyre,</i>
	<i>Lonicera</i>	3SG.POSS-name	DEM:PROX:PL DEM	LNK
4048	<i>ui-rqʰu</i>	<i>kui-dui-dyn</i>	<i>zo</i>	<i>pjuu-NGaʂ</i>
	3SG.POSS-skin	SBJ:PCP-EMPH~be.many	EMPH	<i>pjuu-ŋu.</i>

²⁰It is however alternatively possible that the verb *aχa* is denominal from an unattested inalienably possessed noun *-χa ‘hole, chip, notch’, and that the compounds in Table 5.9 are also from that lost noun.

²¹The compound *rnyftcwaχa* occurs exclusively as postnominal modifier (§9.1.8.1) in the fixed expression *qala rnyftcwaχa* ‘the rabbit with ten holes in his ear’, a trickster character found in traditional stories.

²²Note that this compound has Numeral-Noun order as in other examples (see §5.5.1.2).

- 4049 *nunua tuu-mpcar ny tuu-mpcar, tuu-mpcar ny tuu-mpcar,*
 DEM one-leaf LNK one-leaf one-leaf LNK one-leaf
 4050 *pui-NGaB q^he u-ŋgu li myzui pui-βze q^he,*
 AOR-ACAU_S:peel LNK 3SG.POSS-inside again yet IPFV-grow LNK
 4051 ‘As for the name of the *Lonicera* sp., (it is because) it has a lot of skins
 4052 that shed off, one after the other, and after one has shed off, another one
 4053 grows again inside.’ (14-sWNgWJu, 72-5)

4054 Yet, from a phonological point of view, the form should rather be parsed as
 4055 [kungut-][txrq^hY-NGaB], as the phonological integration between txrq^hY- in *status*
 4056 *constructus* and the following verb root is stronger than that between the numeral
 4057 kungut ‘nine’ and the rest, as shown by the preservation of the final -t with a rare
 4058 heterosyllabic geminate (§4.2.3.1).

4059 Additional less obvious examples of possessive compounds include cnysti ‘per-
 4060 son with a stuffy nose’ (from tuu-cna ‘nose’ and asti ‘be blocked’, see the discussion
 4061 in §5.5.2) and cnaβndzyi ‘snotty-nosed kid’ (from tuu-cnaβ ‘snot’ and a verbal root
 4062 -ndzyi attested in nnyndzyi ‘have (snot)').

4063 Action nominals NV compounds are rare with intransitive verbs. Examples
 4064 include pyymbri ‘bird song’ from pya ‘bird’ and the intransitive mbri ‘cry, sing’ or
 4065 snuŋnar ‘harming people’ from tuu-sni ‘heart’ and naŋ ‘be black’ (§20.13.1).

4066 5.5.5.2 Object-Verb compounds

4067 Object-Verb nominal compounds in Japhug are very productive, and can be clas-
 4068 sified into two main types: actor OV compounds, and action OV compounds.

4069 Actor OV compounds are common in names of trades, animals and even plants,
 4070 such as rjulfci ‘silversmith’, βyŋru ‘miller’, zruyndza ‘praying mantis’ and tʂtçuŋbraŋ
 4071 ‘burdock’. The first of these examples, from the Tibetan loanword rjul ‘silver’ and
 4072 the labile verb fci ‘forge’, requires little explanation. Some compounds present sig-
 4073 nificant morphological alterations, as βyŋru ‘miller’, which comes from the *status*
 4074 *constructus* of βya ‘mill’ and the non-reduplicated form of the verb ruru ‘guard,
 4075 look after’ (§19.7.11). In addition, some compounds of this type do not make much
 4076 sense without some cultural background; as an illustration of how the Japhug
 4077 corpus can be used to better understand the origin of these compounds, I discuss
 4078 below the latter two nouns.

4079 The compound zruyndza ‘praying mantis’ derives from zruy ‘louse’ and ndza
 4080 ‘eat’, and literally means ‘louse eater’, a descriptive term based on the feeding
 4081 habits of that insect, as described in (105).

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- 4082 (105) *nua wi-ta_b ri zruyndza ky-ndo-tci tce, tcendyre zruy*
DEM 3SG-on LOC praying.mantis AOR-take-1DU LNK LNK loose
4083 *rcau_a lyŋytʂy jamar zo wi-cki ky-ta-tci. tce*
UNEXP:DEG five.or.six about EMPH 3SG-DAT AOR:EAST-put-1DU LNK
4084 *kui-mrku nura tce, tce zruy nua lonba zo c^hwi-mqlab*
SBJ:PCP-be.first DEM:PL LNK LNK loose DEM ALL EMPH IPFV-swallow
4085 *tce tu-ndze nua-ŋu. tcendyre kui-maq^hu tce nyki*
LNK IPFV-eat[III] SENS-be LNK SBJ:PCP-be.after LNK DEM:CATAFH
4086 *nua-ŋu, tcendyre ku-numi kui-fse qhe, wi-ŋgu*
SENS-be LNK IPFV-suck[III] SBJ:PCP-be.like LNK 3SG.POSS-inside
4087 *nunau, wi-se nua lu-nua-tcyt q^he*
DEM 3SG.POSS-blood DEM IPFV:UPSTREAM-AUTO-take.out LNK
4088 *c^hwi-mqlab nua-ŋu.*
IPFV-swallow SENS-be
4089 '(When we were little, one of my classmate had a lot of lice, and) we took
4090 a praying mantis (and put it on his clothes), then put five or six lice near
4091 it; the first ones, it swallowed them whole, and the following ones, it did
4092 the following: it would kind of suck them, drink the blood inside them,
4093 and then swallow it (and then throw them away)' (26-zrWGndza, 25-35)

4094 The nouns *tytçuβra_a* ‘burdock’ from (*ty-tçu* ‘son, boy’ and *βra_a* ‘attach’) and
4095 *tc^hemeβra_a* ‘little burdock’ (with *tc^heme* ‘girl’ as first element) literally mean ‘at-
4096 taching boys/girls’; an explanation for these names from local folklore is pro-
4097 vided in (106).

- 4098 (106) *tytçuβra_a tce, cwi kui pa-mto nunau tce tce nua yuu wizy*
burdock LNK who ERG AOR:3→3'-see DEM LNK LNK DEM GEN 3SG:GEN
4099 *ma_a ny, wi-k^ha yuu ma_a ny, wi-kumdza*
not.be:FACT LNK 3SG.POSS-house GEN not.be:FACT LNK 3SG.POSS-relative
4100 *kui-fse ra yuu, nua-tcwi ma_a ny nua-me*
SBJ:PCP-be.like PL GEN 3PL.POSS-son not.be:FACT LNK 3PL.POSS-daughter
4101 *tu tu-ti-nua nua-ŋu. tce nua nua-kumdza*
exist:FACT IPFV-say-PL SENS-be LNK DEM 3PL.POSS-relative
4102 *kui-fse kui-ycyt ra, nua-sk^hruu my-kui-βdi*
SBJ:PCP-be.like SBJ:PCP-be.related PL 3PL.POSS-body NEG-SBJ:PCP-be.well
4103 *a-pur-tu tce, “wo ... wi-rjiti ty-tcwi sci*
IRR-IPFV-exist LNK INTERJ 3SG.POSS-child INDEF.POSS-son LNK

- 4104 *ma tvtciwþrab pur-mto-t-a”*
 be.born:FACT burdock AOR-see-TR:PST-1SG
 4105 ‘The burdock, whoever saw it will have a boy or a girl, him or someone
 4106 from his house or among his relatives. If someone among his relatives is
 4107 pregnant, he will say ‘her child will be a boy, as I saw a burdock.’
 4108 (26-NalitCaRmbWm, 109+)

4109 The object-verb compound *tʰylwṛçtṣat* ‘sparing earth’ (107), from *tʰylwa* ‘earth’
 4110 and the transitive *çtṣat* ‘spare’, occurs as postnominal modifier (§9.1.8.1) of the
 4111 noun *qandze* ‘earthworm’, semantically equivalent to a post-nominal subject rela-
 4112 tive clause *tʰylwa u-kui-çtṣat* (earth 3SG.POSS-SBJ:PCP-spare). This is the only case
 4113 of a Noun-Verb compound in which both the subject and the object of the base
 4114 verb are overt.

- 4115 (107) *nunuu kui-myći kuniy kui-ry-çtṣat nu, qandze*
 DEM SBJ:PCP-be.rich also SBJ:PCP-APASS-spare DEM earthworm
 4116 *tʰylwy-çtṣat tu-ti-nui.*
 earth-sparing IPFV-say-PL

4117 ‘Someone who spares things (does not waste anything) even though he
 4118 is rich, people call him an ‘earth-sparing earthworm’’ (25-akWzgumba,
 4119 136-137)

4120 Like actor OV compounds, action nominal compounds comprise a nominal
 4121 root and a transitive verbal root. The nominal root in *status constructus* corre-
 4122 sponds to the object of the verb, as in the compound *cʰytsʰi* ‘alcohol drinking’
 4123 from *cʰa* ‘alcohol’ and *tsʰi* ‘drink’. This class of nouns, which occur in light verb
 4124 constructions and serve as bases for incorporating denominal verbs (§20.13.1), is
 4125 discussed in §16.4.7 and §24.4.3.3.

4126 Not all compounds whose second element originates from a transitive verb
 4127 are Object-Verb (or Adjunct-Verb) compounds. Two potentially ambiguous cases
 4128 must be pointed out.

4129 First, there are Noun-Noun compounds whose second element is a bare action
 4130 nominal, deriving from a transitive verb (see §16.4.6), but which loses its pos-
 4131 sessive prefix as is usual in compounding (§5.4.3.1). In such cases the resulting
 4132 Noun-Noun compound is not formally distinguishable from a Noun-Verb com-
 4133 pound, and only the meaning can be used to differentiate between the two classes.
 4134 For instance, the plant name *tsṛçpʰyt* ‘plantain’ has the *status constructus* of *tsu*
 4135 ‘path’ as a first element, while its second part *-çpʰyt* can be interpreted as either
 4136 directly from the verb *çpʰyt* ‘patch’ (‘road patcher’) or from the derived noun *tv-*
 4137 *çpʰyt* ‘patch (n)’ (a piece of fabric used to patch worn clothes) (‘road patch’). In

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4138 this particular case, the second interpretation is more likely, and hence *tsyçpʰyt*
4139 ‘plantain’ is better analyzed as a Noun-Noun compound.

4140 Second, when the second element of a Noun-Verb compound is a *a*- passive
4141 verb (see §18.1), the *a*-/*y*- prefix is absorbed by the first element of the compound
4142 and becomes invisible. In the resulting form, the second element superficially
4143 looks similar to the transitive verb. For instance, the noun *cnysti* ‘person with
4144 a stuffy nose’ appears to derive from *tu-çna* ‘nose’ and the transitive verb *sti*
4145 ‘block’. However, semantics rules out such a derivation: it is a possessive com-
4146 pound whose literal meaning is ‘whose nose is blocked’ (see §5.5.5.1), and cannot
4147 be interpreted as ‘(person) blocking noses’, the expected meaning of an Object-
4148 Verb compound. Since the passive *asti* ‘be blocked’ of *sti* ‘block’ is well-attested,
4149 as shown by (108), it is better to analyze *cnysti* ‘person with a stuffy nose’ as a
4150 Subject-Verb possessive compound (§5.5.5.1) derived from that passive form.

- 4151 (108) *maka nú-wy-çuay-mu* *mua-pjy-cʰa* *ma mua-pjy-mtsʰym*
at.all IPFV-INV-CAUS-be.afraid NEG-IFR.IPFV-can LNK NEG-IFR-hear
4152 *matci wi-rna* *pjy-k-y-sti-ci*.
because 3SG.POSS-ear IFR.IPFV-PEG-PASS-block-PEG

4153 ‘The noise could not frighten him, as he did not hear it, because his ears
4154 were blocked.’ (140514 huishuohua de niao-zh, 203)

4155 5.5.5.3 Adjunct-Verb compounds

4156 Adjunct-Verb compounds are action nominals (§16.4.7). Like other action nomi-
4157 nal compounds, they can undergo denominal derivation to become incorporating
4158 verbs (§20.13.1).

4159 Adjunct-Verb compounds typically take body parts or locative nouns as first
4160 element, as *zgrutçʰu* ‘nudge’ and *krytçʰu* ‘headbutt’, which combine the body parts
4161 *tu-zgru* ‘elbow’ and *tu-ku* ‘head’ with the verb *tçʰu* ‘stab’ as second element.
4162 Here the body parts cannot be analyzed as objects: the object of *tçʰu* ‘stab’ is the
4163 person being gored/hit, not the part of the body one uses, as shown by the 1SG
4164 indexation on the verb in (109).

- 4165 (109) *mbala kuu tí-wy-tçʰu-a*
bull ERG AOR-INV-stab-1SG
4166 ‘The bull gored me.’ (elicited)

4167 These compounds are used with the light verb *lxt* ‘throw, release’ as in (110).
4168 Additional examples are discussed in §16.4.7 and §20.13.1 and §20.13.4.

- 4169 (110) *zgruutc^huu tv-lat-a*
 nudge AOR-throw-1SG
 4170 ‘I nudged (him).’ (elicited)

4171 The incorporating denominal verbs *suzgruutc^huu* ‘nudge’ or *nrkrytc^huu* ‘give a
 4172 headbutt’, ‘gore’ are considerably more common than light verb constructions
 4173 with compound action nouns such as (110).

4174 The compound *mjaumtsaꝝ* ‘grasshopper’ from *tu-mjaꝝ* ‘eye’ and *mtsaaꝝ* ‘jump’ is
 4175 obscure, but unlikely to be a possessive compound ‘whose eyes jump’, and should
 4176 rather be analyzed as an adjunct compound (maybe ‘jumping with (big) eyes’, as
 4177 if from a comitative adverb like *kŕmynumjaꝝ* ‘with eyes’ §5.8.1). If this analysis is
 4178 correct, *mjaumtsaꝝ* is the only example of *actor* Adjunct-Verb compound.

4179 5.5.6 Verb-Noun compounds

4180 Verb-Noun compounds are extremely rare in Japhug, as they are in general in
 4181 Trans-Himalayan languages other than Chinese.

4182 Adjectival stative verbs nearly always occur as second element in compounds
 4183 with a noun (§5.5.5.1), but the opposite order is attested in *sŋyaβdi* ‘unpleasant
 4184 smell’ from *tv-di* ‘smell’ and *sŋyaβ* ‘be unpleasant’ (on which see §20.3.1) a noun
 4185 which can occur with the intransitive verb *mnym* ‘smell’ as in (111).

- 4186 (111) *sŋyaβ-di* *zo* *pn̥-mnym*
 be.unpleasant-smell EMPH SENS-smell
 4187 ‘There is an unpleasant smell.’ (elicited)

4188 A possible example of Verb-Noun compound with a transitive verb is *ndzypri*
 4189 ‘brown bear’, comprising *pri* ‘bear’ and *ndza* ‘eat’ – as shown by (112) from a text
 4190 about bears, it is considered by some native speakers of Japhug as a man eater,
 4191 though this explanation could be folk-etymology. Note that this compound is also
 4192 anomalous in that when transitive verbs are used in compounds with a noun, that
 4193 noun is either an object (§5.5.5.2) or adjunct (§5.5.5.3), never the subject.

- 4194 (112) *tce ndzypri* *kr-ti* *nur tce turme tu-kui-ndza*
 LNK brown.bear INF-say DEM LNK people IPFV-GENR:S/O-eat
 4195 *nur-ŋgryl*
 SENS-be.usually.the.case
 4196 ‘It eats people, so is it called *ndzypri*? (21-pri, 94)

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We find several examples of nominal compounds whose structure is *tr-*+Verb +Noun, where the verb is an adjectival stative verb. This category includes *trqiaþjimyy* ‘*Lactarius sp.*’, literally ‘bitter mushroom’, from the noun *trjimyy* ‘mushroom’ (see §5.1.2.10 concerning the lost of *tr-*) and the verb *qiaþ* ‘be bitter’, or *trmbextsa* ‘type of shoes’ from *tuu-xtsa* ‘shoe’ and *mbe* ‘be old’. These should not be analyzed as Verb-Noun compounds however, as the first element originates from a nominalized form of the verb (either a property noun deriving from a verb (§16.4.6) in indefinite possessor *tr-* form (§5.1.2.7) or a *tr-* abstract noun, §16.4.2): they are rather a subtype of Noun-Noun compounds.

The same applies to compounds whose first element comes from a participle, such as *kyrrijimyy* ‘type of mushroom’ from *trjimyy* ‘mushroom’ with the subject participle *kuu-yrji* ‘green one’ /kyrji/ from the verb *arji* ‘be green’ (see additional examples in §16.1.1.7). Note that the compounding order is unexpected, as participles of adjectival stative verbs generally follow the noun (§9.1.8.3).

5.6 Noun class prefixes

Noun class prefixes are prefixal elements that occur in some nouns, whose root cannot occur on its own, except for a few rare exceptions (such as *qapyymtumtuu* ‘hoopoe’ discussed in §5.6.1). Uvular *qa-/χ-/k-* and velar *ku-/x-/y-* prefixes are attested, and occur on animal names, plant names and nouns referring to traditional objects. Additional body part class prefixes, in particular *m-* are also present in Japhug.

Dental prefixal elements such as *tr-* or *tu-* are very common, but are better interpreted as frozen indefinite possessor prefixes (see §5.1.2.10), rather as noun class prefixes.

5.6.1 Uvular animal name prefix

The uvular animal prefix has a basic form *qa-* (Table 5.10) and a reduced allo-morph *χ-/k-*, attested in a few names like *əmbroŋ* ‘wild yak’, *rtčʰurjuu* ‘caterpillar’ and *tčʰuχpri* ‘salamander’.

Note that *əmbroŋ* ‘wild yak’ is a borrowing from Tibetan རྩୟ གླྷ ‘*broŋ* ‘wild yak’, a fact that possibly suggests that the *χ-/k-* prefix has some degree of productivity (see Jacques 2014d).

The noun *qapyymtumtuu* ‘hoopoe’ is clearly a compound containing the *status constructus* of *pya* ‘bird’ and the reduplicated form of the noun *uu-mtuu* ‘crest’, to which the class prefix *qa-* has been added. The origin of this compound is still transparent to native speakers (see 85, §25.5.2).

4232 The allomorph *qa-* is reduced to its non-syllabic variants *χ-/β-* when the pre-
 4233 fixed noun occurs as the second member of a compound. The nouns *tčʰwuxpri*
 4234 ‘salamander’ and *rtčʰurjuu* ‘caterpillar’ are examples of this reduction. The for-
 4235 mer is a compound of *tčʰuu-* (a syllable borrowed from Tibetan 藏 *tčʰu* ‘water’) and
 4236 -*xpri*, a variant of *qapri* ‘snake’. The latter comprises the syllable *rtčʰu-*, *status*
 4237 *constructus* of the unprefixed root of *turtčʰi* ‘type of vegetable (酸酸菜)’, and the
 4238 second -*xjuu* is the reduced variant of *qajuu* ‘worm’.

Table 5.10: Animal name *qa-* prefix

<i>qacʰya</i> ‘fox’	<i>qandže</i> ‘earthworm’
<i>qačyi</i> ‘big fly’	<i>qandži</i> ‘anadromous fish’
<i>qačpa</i> ‘frog’	<i>qandžyi</i> ‘falcon’
<i>qađdo</i> ‘crow’	<i>qani</i> ‘mole’
<i>qaјtšʰa</i> ‘aegyptius monachus’	<i>qapar</i> ‘dhole’
<i>qajuu</i> ‘worm’	<i>qapyrmatumtuu</i> ‘hoopoe’
<i>qaјy</i> ‘fish’	<i>qapri</i> ‘snake’
<i>qala</i> ‘rabbit’	<i>qarma</i> ‘crossoptilon’
<i>qaliač</i> ‘eagle’	<i>qartsʰaz</i> ‘deer’
<i>qambalula</i> ‘butterfly’	<i>qartsʰi</i> ‘cricket’
<i>qambruu</i> ‘male yak’	<i>qazo</i> ‘sheep’
<i>qamtčur</i> ‘shrew’	

4239 5.6.2 Velar animal name prefix

4240 While most nouns beginning in *ku-* are frozen participles (see §16.1.1.7), there is a
 4241 residue of forms which cannot be analyzed as deverbal nouns: no corresponding
 4242 verb root is attested, and moreover some of them have cognates elsewhere in the
 4243 family. Table 5.11 presents animal names that are not derivable from any verb
 4244 root, and appear to bear a *ku-* class prefix, which is to be distinguished from the
 4245 uvular one. Among these words, *kurtsry* ‘snow leopard’ has a Tibetan cognate
 4246 猞猁 *gzig* ‘leopard’ with a *g-* preinitial, which is possibly related to the *ku-* prefix
 4247 in Japhug.

4248 There is a handful of nouns with reduced allomorphs *y-*, *x-* or even metathesized as *βy-* in some words, corresponding to *kə-* in Situ (see the phonological
 4249 discussion in Jacques 2014b: 6), including *xčiri* ‘weasel’, *xtut* ‘wild cat’, *yzuu* ‘monkey’,
 4250 *yni* ‘flying squirrel’, *βyuz* ‘badger’ and *βyza* ‘fly’. The same allomorphy is

Table 5.11: Animal name *kuu-* prefix

<i>kuučpaz</i>	'marmot'
<i>kuujka</i>	'pyrrhocorax'
<i>kumu</i>	'Tetraogallus tibetanus'
<i>kuupyz</i>	'type of bug'
<i>kuurtsy</i>	'snow leopard'
<i>kuurji</i>	'beast'
<i>kuurnuu</i>	'mite'

4252 observed between the subject participle *kuu-* (§16.1.1) and the nominalization pre-
 4253 fixes *x-/y-* (§16.5.2).

4254 5.6.3 Uvular plant name prefix

4255 Some plant names have a uvular class prefix *qa-*, including both cultivated and
 4256 wild plants (and even plant parts), such as *qačti* 'peach', *qaʃtyi* 'oat', *qampʰor* 'oak
 4257 leaves', *qandzi* 'type of fir', *qazmbri* 'vine', *qawuz* 'edelweiss' and many others.

4258 5.6.4 Other uses of the uvular class prefix

4259 In addition to animal and plants names, the class prefix *qa-* appears on some
 4260 tools (*qajo* 'earthen pot', *qase* 'leather rope', *qaryt* 'rake', *qapi* 'flint stone'), names
 4261 of periods of the year (*qartsui* 'winter', *qartsyβ* 'harvest'), materials (*qandzi* 'tin',
 4262 *qambut* 'sand') or natural forces like *qale* 'wind'.

4263 The reduced form *κ-* of the class prefix occurs with the noun *qale* 'wind' in
 4264 some compounds such as *akuucʰοble* 'north/east wind' and the abstract inalienably
 4265 possessed noun *wi-ble* 'reputation' (and the verbs derived from it, such as *rastle* 'be
 4266 polite').

4267 5.6.5 Body part noun prefixes

4268 The identification of class prefixes in body parts mainly rests on comparative
 4269 evidence. Other Trans-Himalayan languages that preserve clusters such as Ti-
 4270 betan have in some names for body parts cluster that do not match those found
 4271 in Japhug, for instance རྩୟାସ ମକ୍ରିସପା 'bile' and ଶ୍ଵେତ ସକ୍ରୁତ 'neck' corresponding to
 4272 the Japhug inalienably possessed nouns *tu-čkrut* 'bile' and *tu-mke* 'neck' (see
 4273 §5.1.2.3), suggesting that body part class prefixes such as *č-* and *m-* have been
 4274 added to these words in Gyalrongic and Tibetan independently.

⁴²⁷⁵ Apart from the *m-* and *c-/z-* class prefixes, some alienably possessed body parts
⁴²⁷⁶ such as *qambyo* ‘earwax’ have a *qa-* prefix (§5.1.2.3).

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⁴²⁷⁸ Nominal derivations pale compared to the rich verbal (§11.2.2) and even ideo-
⁴²⁷⁹ phonetic (§10.1.1) derivations in Japhug. There is little derivational prefixation in
⁴²⁸⁰ nouns (aside from the collective *kyndzi-* prefix and derivational uses of class pre-
⁴²⁸¹ fixes, as seen in §5.6 above), and nearly all of the suffixes or quasi-suffixes in-
⁴²⁸² volved in these derivations are traceable to inalienably possessed nouns that are
⁴²⁸³ still attested in the language, and have thus nearly no antiquity.

5.7.1 Privative

⁴²⁸⁴ The suffix *-lu* can be combined with the *status constructus* form of body part
⁴²⁸⁵ nouns, without possessive prefix, to derive a noun meaning ‘...less’, ‘without ...’
⁴²⁸⁶ that can be used as a modifier (§5.2). Examples attested in the corpus are indicated
⁴²⁸⁷ in Table 5.12, but this derivation appears to be productive.

Table 5.12: Privative *-lu* suffix

Base Noun	Privative form
<i>ta-ʂru</i> ‘horn’	<i>ʂrulu</i> ‘hornless’
<i>tx-jme</i> ‘tail’	<i>jmrulu</i> ‘without tail’
<i>tui-jaʂ</i> ‘hand’	<i>jaʂlu</i> ‘missing a hand’
<i>tui-ku</i> ‘head’	<i>kʂlu</i> ‘headless’

⁴²⁸⁹ These privative forms can modify other nouns, and are placed after the nouns
⁴²⁹⁰ and before determiners such as demonstratives or numerals, as in (113) and (114).

⁴²⁹¹ (113) *ʐyni yuu ftsoʂ* *ʂrulu ci ta-rku-nu* *nui-ŋu*
⁴²⁹² 3DU GEN female.hybrid.yak hornless INDEF AOR:3→3'-put.in-PL SENS-be
⁴²⁹³ ‘They gave them a hornless female yak (to take with them back to the
husband’s home.’ (2005-stod, 243)

⁴²⁹⁴ Privative nouns are systematically glossed in Japhug with possessor participial
⁴²⁹⁵ relatives in *kui-me* ‘not having’ (§23.5.10.1), as in (114) (see also example 97 from
⁴²⁹⁶ §5.5.1.1).

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- 4297 (114) *tce kuuju jmylu numuu turme nui-ŋu, u-jme kuu-me*
 LNK animal tailless DEM man SENS-be 3SG.POSS-tail SBJ:PCP-not.exist
 4298 *nui tce, tce kuuju jmylu numuu nui-spu cti tce nui*
 DEM LNK LNK animal tailless DEM IPFV-be.crazy be:AFF:FACT LNK DEM
 4299 *nui-spu tce tce icq^ha tu-ryi*
 AOR-be.crazy LNK LNK the.aforementioned INDEF.POSS-seed
 4300 *c^hu-kuu-χtir nui nui-kuu-spu tu-syrm*i*-nui.*
 IPFV-SBJ:PCP-spread DEM AOR-SBJ:PCP-be.crazy IPFV-call-PL
 4301 ‘The ‘tailless animal’ is the man, and ‘he becomes crazy’, (when the crow
 4302 say) that (people) became crazy, it means that they are sowing seeds.’
 4303 (22-qajdo, 47-9)

4304 The noun *bejlu* ‘left-handed’ is not a privative noun deriving from *ke* ‘left’,
 4305 but rather a compound comprising the property noun *u-jlu* (§5.1.2.7) as second
 4306 element, in its grammaticalized meaning as a restrictive focus marker (§9.1.6.5),
 4307 literally meaning ‘only (with) left (hand)’.

4308 5.7.2 Relative location

4309 The prefix *maj-* can be used to derive nouns referring to the position of the ref-
 4310 erent on either the vertical, the riverine or the solar dimensions, which are en-
 4311 coded in verbal morphology, postpositions, relator nouns and locative adverbs
 4312 (§8.2.10, §8.3.4.1, §15.1.3, §22.2.6). These nouns are homophonous with correspon-
 4313 ding verbs of relative location (§15.1.3.4).

Table 5.13: Nouns of relative location and corresponding locative ad-
 verbs

Locative adverb	Noun of location
<i>taš</i>	<i>majtaš</i> ‘the one on the upper side’
<i>pa</i>	<i>majpa</i> ‘the one on the lower side’
<i>lo</i>	<i>majlo</i> ‘the one upstream’
<i>t^hi</i>	<i>majt^hi</i> ‘the one downstream’
<i>kui</i>	<i>majkui</i> ‘the one in the east side’
<i>ndi</i>	<i>majndi</i> ‘the one in the west side’

4314 The nouns of relative location can either occur as postnominal attributes, but
 4315 can also (less commonly) be used their own as illustrated by (115).

- 4316 (115) *icq^ha nuu, t^hi nuu, kuki cnat man^hi*
 just.before DEM downstream de DEM.PROX heddle downstream.one
 4317 *ki tx-job-a puu-ju tce, t^ham tce maŋlo nura*
 DEM.PROX AOR-lift-1SG PST.IPFV-be LNK now LNK upstream.one DEM.PL
 4318 *tú-wy-job ra*
 IPFV-INV-lift be.needed:FACT
 4319 ‘Just before, I had lifted the heddle on the lower (downstream) side (of
 4320 the loom), now we have to lift the ones on the upper (upstream) side.’
 4321 (video 20140429090403, 71-72)

4322 5.7.3 Diminutive

4323 There are four diminutive formations in Japhug, with the quasi-suffixes *-puu*, *-tsa*,
 4324 *-tçuu* and *-li*.

4325 The most productive is the *-puu* suffixation. This transparent suffix comes from
 4326 the noun *tx-puu* ‘offspring, young’ (from Tibetan བུ ‘son’). A diminutive for-
 4327 mation based on the same noun also exists in Tibetan (Uray 1952, Hill 2014b:
 4328 627); whether the diminutive formation was independently innovated, or was
 4329 borrowed from Tibetan is a question that needs to be further investigated. It is
 4330 also attested in Situ (Zhang 2016, Lai 2017: 151).

4331 Earlier diminutives are formed with the *status constructus* of the noun, for
 4332 instance *tç^hemypuu* ‘young girl’ from *tç^heme* ‘girl’, *staxpuu* ‘pea’ from *stor* ‘broad
 4333 bean’, or *k^huzypuu* ‘puppy’ from a non-attested form **k^huza*, probably itself the
 4334 *-tsa* diminutive of *k^huna* ‘dog’, borrowed from a Situ dialect.

4335 More recent diminutives are directly formed with the base form, such as *qapripuu*
 4336 ‘little serpent’. This formation is extremely productive, and applies to plants, an-
 4337 imals and even objects as in (116).

- 4338 (116) *tce sruŋloŋ-puu ci jx-k^ho tce*
 LNK ring-DIM INDEF IFR-give LNK
 4339 ‘He handed him a little ring.’ (2011-4-smanmi, 120)

4340 The suffix *-puu* is recursive: examples of doubly suffixed nouns are found in the
 4341 corpus, as in (117) for instance.

- 4342 (117) *txndzi-puu-puu nura ku, u-p^honbu nura ko-syllyuu-nuu ri,*
 demon-DIM-DIM DEM:PL ERG 3SG.POSS-body DEM:PL IFR-link-PL LNK
 4343 ‘The little demonlings put back his body together, but...’ (150909
 4344 xifangping-zh, 93)

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4345 Suffixation with *-pu* is the fused variant of the property noun construction
4346 with *u-pu* ‘little one’ described in §[5.1.2.7](#).

4347 A diminutive that is common to all Gyalrongic languages is the suffix *-tsa/-za*
4348 (Situ *-tsa* or *-za* ([Lín 1993](#): 163), Khroskyabs *-ze* / *-zə* / *-za*, *-tsi* ([Lai 2017](#): 158), Stau
4349 *-zə*), found in fossilized forms in nouns such as *kʰu̯tsa* ‘bowl’ and *βy̯rza* ‘fly’,²³ but
4350 still visible in diminutive forms like *pa̯tsa* ‘piglet’ (from *pa̯s* ‘pig’). It originates
4351 from the noun ‘son’ that is lost in Japhug but still attested in Situ and Khroskyabs
4352 (Wobzi *z̥i* ‘young man’).

4353 In Japhug the *-tsa* diminutive is not very productive; it applies to some nouns
4354 that already have a *-pu* diminutive such as *sto̯tsa* ‘name of plant’ from *sto̯s* ‘broad
4355 bean’ (besides *staχpu* ‘pea’).

4356 The third diminutive suffix *-t̥cu*, like the two preceding ones, originates from
4357 a noun meaning ‘offspring’, *tr-t̥cu* ‘son’, and requires *status constructus*.

4358 It is used for animals (*kumpyr̥t̥cu* ‘sparrow’ from *kumpya* ‘fowl’) or inanimate
4359 objects (*kʰyt̥cu* ‘little house’ from *kʰa* ‘house’ or *b̥yt̥cu* ‘little gunny bag’ from *b̥a*
4360 ‘gunny bag’). It occurs in some lexicalized forms such as *mbrut̥cu* ‘knife’.²⁴

4361 The suffix *-li* is the least productive of all diminutive formations, and the only
4362 one that cannot be traced to an existing noun. It appears is *t̥eʰemyli* ‘little girl’ (a
4363 synonym of *t̥eʰemypu* ‘little girl’) and in *rgali* ‘young cow’.

4364 5.7.4 Augmentative

4365 A handful of nouns, some of Tibetan origin, have an augmentative form in *-te*,
4366 originally from a property noun **u-te* ‘big’ (related to the verb *wxti* ‘be big’).

4367 Augmentatives include *t̥yomte* ‘cultivated xanthoxylum’ (from *t̥yom* ‘xanthoxylum’),
4368 *tuijite* ‘big field’ (from *tu-ji* ‘field’, name of several fields in Kamnyu), *t̥eʰute*
4369 ‘big river’ (from 西 *t̥eʰu* ‘water, river’) and the possessive compound *ŋgute* ‘per-
4370 son with a big head’ (with *ŋgu-* from Tibetan ཙ “go ‘head, top’; this stem is not
4371 attested in Japhug as an independent word).

4372 5.7.5 Derogatory

4373 There are three derogatory quasi-suffixes in Japhug, deriving designations of old
4374 or broken things: *-do* and *-mbe* ‘old X’ and *-nqra* ‘broken X’. These suffixes are

²³The noun *βy̯rza* ‘fly’ is cognate to Brag-dbar *kav̥s*, Khroskyabs *jvazá* ([Zhang 2016](#), [Lai 2017](#): 156) and originates from proto-Gyalrong **kpoṣs-tsa* ([Jacques 2008a](#): 53).

²⁴The root of this noun is metathesized from **mbur*; its cognates have a *-tsa* diminutive in Situ (Brag-dbar *mbartsie*, [Zhang 2016](#): 228) and Khroskyabs (Wobzi (*bərzé*, [Lai 2017](#): 115).

4375 the fused variants of the property nouns *u-nqra* ‘broken one’, *u-do* ‘old one’ and
 4376 *tx-mbe* ‘old thing’ (see §5.1.2.7).

4377 The suffixes *-do* and *-mbe*, like their corresponding property nouns, differ in
 4378 that the former occurs with animals and plants (*nunja-do* ‘old cow’, *rṛylpu-do* ‘old
 4379 king’), while the latter is used for inanimate objects.

4380 In a few cases, the suffixed noun is in status constructus (as *k^hṇnqra* ‘ruin’ from
 4381 *k^ha* ‘house’ and *-nqra*, or *k^hudo* ‘old dog’ (from *k^huna* ‘dog’ and *-do*, see §5.4.2.3).
 4382 When the suffixed noun is inalienably possessed, addition of a derogatory suffix
 4383 does not turn it into an alienably possessed noun, as in *tu-rcymbe* ‘old jacket’
 4384 from *tu-rcu* ‘jacket’ and *-mbe*.

4385 5.7.6 Inhabitant

4386 The inhabitant suffix *-puu* derives from the same noun *tx-puu* ‘offspring, young’
 4387 from which the diminutive *-puu* ultimately originates (see §5.7.3). It is used to de-
 4388 rive nouns referring to inhabitants of a certain place, and occurs without *status*
 4389 *constructus*. For instance, from the village names of *kṛmṇuu* (the village whose
 4390 speech is described in this grammar) and *snarndi* (a village in Tshobdun), one
 4391 derives *kṛmṇupuu* ‘person from Kamnyu’ and *snarndipuu* ‘person from Snarndi’
 4392 (see the text 26-tshubdWnpW in the corpus). Given the high productivity of this
 4393 derivation, these nouns are not indicated in the dictionary, as it would unneces-
 4394 sarily inflate the number of entries.

4395 An alternative way to refer to the inhabitants of a place is by adding the plural
 4396 *ra* to it (§5.2.1).

4397 5.7.7 Gender

4398 There is no morphological expression of gender in Japhug. For animals, the nouns
 4399 *p^hu* ‘male’ and *mu* ‘female’ (from Tibetan ད ཚ *p^ho* ‘male’ and ད ཚ *mo* ‘female’) can
 4400 be used on their own (as in 118) or occur as second member of compounds, as
 4401 *kumpyap^hu* ‘rooster’ and *kumpyamu* ‘hen’ from *kumpya* ‘fowl’, or *lulymu* ‘female
 4402 cat’ from *lulu* ‘cat’, with *status constructus* of the first noun.

- 4403 (118) *txk^he pṛytcu ndṛre p^hu mu saxsyl*
 stupid bird:DIM on.the.other.hand male female be.clear:FACT
 4404 ‘The male and the female of the ‘stupid bird’, as opposed (to the birds
 4405 previously discussed), are easy to distinguish.’ (23-scuz, 45)

4406 The suffixes *-pa* and *-muu* (from Tibetan *-pa* and *-mo*, respectively) also occur for
 4407 a handful of nouns, some of Tibetan origin (*srunmuu* ‘rākshasi’ from ཟ ར ཤ ས *srin.mo*

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‘râkshasî’) but also some local names such as *ngarpa* ‘male one quarter yak hybrid’ vs. *NGarmuu* ‘female one quarter yak hybrid’.

The noun *paxju* ‘boar’ from *pax* ‘pig’ has a suffix *-ju* that is not found in any other word.

For some domestic animals, a lexical distinction is made between male and female animals (see Table 5.14).

Table 5.14: Lexical distinction of male and female animals

Male	Female
<i>qambruu</i> ‘male yak’	<i>qra</i> ‘female yak’
<i>jla</i> ‘male hybrid yak’	<i>ftsoꝝ</i> ‘female hybrid yak’
<i>mbala</i> ‘bull’	<i>nuija</i> ‘cow’
<i>zraqꝝ</i> ‘he-goat’	(<i>tsʰynmu</i> ‘ewe’)

5.7.8 Collective

While Japhug lacks number inflection, there are several collective derivations: the social relation collective, reduplicated collectives and the *dvandva* collective.

5.7.8.1 Social relation collective

The first type of collective is a noun prefixed in *kvndzi-* and built either from kinship or social relation terms (which can be either inalienably or alienably possessed nouns), designating a group of people linked to one another by a specific relation.²⁵

Two types of social relation collectives should be distinguished: reciprocal and non-reciprocal collectives.

Reciprocal collectives (Table 5.15) are derived from nouns designating a relationship in which all members of the group call each other by the same term: these can be non-kinship terms like ‘companion’ or ‘friend’ or kinship terms like *tx-sqʰaj* ‘sister’ (of a female) (§27.2.2.1).

Non-reciprocal collectives (Table 5.16) are based on nouns designating unequal relationships, in which the members designate each other by different terms, in

²⁵There is some doubt about whether this prefix should be transcribed as *kvndzu-* or *kvndzi-*. See §3.5.2.2 on the question of the contrast between /i/ and /u/ following palatals and alveolo-palatals in non-final syllables.

Table 5.15: Reciprocal social relation collectives

Collective	Base noun
<i>kvndziyufsu</i> ‘friends’	<i>yufsu</i> ‘friend’
<i>kvndzibzansa</i> ‘friends’	<i>βzajsa</i> ‘friend’
<i>kvndziçaxpu</i> ‘friends’	<i>çaxpu</i> ‘friend’
<i>kvndzikumdza</i> ‘relatives’	<i>kumdza</i> ‘relative’
<i>kvndzirya</i> ‘neighbours’	<i>tr-rya</i> ‘neighbour’
<i>kvndzislamaxti</i> ‘classmates’	<i>slamaxti</i> ‘classmate’
<i>kvndzisqʰaj</i> ‘sisters’	<i>tr-sqʰaj</i> ‘sister’ (of a female)
<i>kvndzimvtsa</i> ‘mother’s sister’s children’	<i>tr-mvtsa</i> ‘mother’s sister’s child’
<i>kvndzitxtewxhti</i> ‘friends (between males)’	<i>txtewxhti</i> ‘friend (between males)’
<i>kvndzitçʰemvxti</i> ‘friends (between female)’	<i>tcʰemvxti</i> ‘friend (between female)’
<i>kvndzixtry</i> ‘brothers’	<i>tr-xtry</i> ‘brother’ (of a male)
<i>kvndziχti</i> ‘companions’	<i>tuu-χti</i> ‘companion’
<i>kvndzizda</i> ‘companions’	<i>tuu-zda</i> ‘companion’

particular kinship terms involving relatives from different generations or different gender. Aside from kinship terms, groups comprising domestic animals and their owners can also be formed by the same process from the name of the animal, as *kvndzimbro* ‘horseman and his horse’ and *kvndziftsov* ‘female hybrid yak and its owners’ (see example 120 below).

Non-reciprocal collectives are either formed from one of the two nouns, which can be either from the lower (*kvndziye* ‘grandparents and grandchildren’) or the higher generation (*kvndzini* ‘paternal aunt and her nephews’), or by a combination of two kinship terms, the first of which, in some cases, undergoes changes to the point of being barely recognizable (*kvndzipymdu* ‘paternal uncle and his nephews’).²⁶

The collective nouns can be used as normal nouns and take case marking, numerals and other modifiers, as in (119).

- 4443 (119) *kvndzi-xtry χsum pjv-tu-nu*
 COLL-brother three IFR.IPFV-exist-PL
 4444 ‘There were three brothers.’ (07-deluge, 1)

²⁶In the case of *kvndziwytaš* ‘maternal aunt and her nephews’, the origin of the element *-wy-* is not identifiable.

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Table 5.16: Non-reciprocal social relation collectives

Collective	Base noun
<i>kyndziye</i> ‘grandparents and grandchildren’	<i>tr-ye</i> ‘grandchild’
<i>kyndzizi</i> ‘siblings’	<i>ta-zi</i> ‘younger sibling’
<i>kyndzime</i> ‘parents and daughter’	<i>u-me</i> ‘daughter’
<i>kyndzini</i> ‘paternal aunt and her nephews’	<i>tr-ji</i> ‘father’s sister’
<i>kyndzimbro</i> ‘horseman and his horse’	<i>mbro</i> ‘horse’
<i>kyndzislama</i> ‘master and disciple’	<i>slama</i> ‘student’
<i>kyndzijla</i> ‘male hybrid yak and its owners’	<i>jla</i> ‘male hybrid yak’
<i>kyndziftsoz</i> ‘female hybrid yak and its owners’	<i>ftsoz</i> ‘female hybrid yak’
<i>kyndzipas</i> ‘pig and its owners’	<i>pas</i> ‘pig’
<i>kyndziqazo</i> ‘sheep and its owners’	<i>qazo</i> ‘sheep’
<i>kyndzitsʰyt</i> ‘goat and its owners’	<i>tsʰyt</i> ‘goat’
<i>kyndzirpuftsa</i> ‘maternal uncle and his nephews’	<i>tr-rpu</i> ‘mother’s uncle’ (1)
<i>kyndziwṛłas</i> ‘maternal aunt and her nephews’	<i>tr-ftsa</i> ‘sister’s son’ (2)
<i>kyndzipymdu</i> ‘paternal uncle and his nephews’	<i>tr-łas</i> ‘mother’s sister’ (2)
<i>kyndziwṛmuspnom</i> ‘brother and sisters’	<i>tr-βyo</i> ‘father’s brother’ (1)
	<i>tr-mduu</i> ‘brother’s child’ (2)
	<i>tr-wṛmu</i> ‘brother’ (of a female) (1)
	<i>tr-snom</i> ‘sister’ (of a male) (2)

Social relation collectives are also found in Situ and Tshobdun (Sun 1998: 107), where they have optional reduplication; in Japhug, partial reduplication (as in §5.7.8.2) is used by some speakers, as *kyndziftsuftsor* ‘female hybrid yak and its owners’ in example (120), from a story by Kunbzang Mtsho.

- 4449 (120) *kyndzi-ftsu~ftsoŋ* *χsum nuš, ts^hwnts^hun* *kui-pa*
 COLL-female.yak.hybrid three DEM IDPH(II):in.order INF:STAT-AUX
 4450 *ky-nur-łor-nui* *nui-ŋu,*
 AOR:EAST-AUTO-come.out-PL SENS-be
 4451 ‘(The girl, her husband) and their female hybrid yak crossed (the large
 4452 river) without damage.’ (2003 Kunbzang, 186)

The lists in Tables 5.15 and 5.16 comprise most common social relation collectives, but are by no means complete lists. For instance, next to *kyndzirpufts*

‘maternal uncle and his nephews’ from *tr-rpu* ‘mother’s uncle’ and *tr-fsa* ‘sister’s son’, the terms *kyndzirpu* ‘maternal uncle and his nephews’ and *kyndziftsa* ‘nephew with his maternal uncles and aunts’ are also possible though less common. However, some combinations are considered incorrect. For instance, Tshendzin considers that *†kyndzirzaβ* (from *tr-rzaβ* ‘wife’) is only found in children’s language (*nu tr-pvtsa ra kui tu-ti-nuŋ ygryl* ‘children talk like that’), as the correct term is *bz̥rmi* ‘husband and wife’ from Tibetan དྲྡྷ་མི་ *bza.mi* ‘husband and wife’.

There is in addition an irregular collective *kytsa* ‘parents and children’, with the same element *-tsa* found in some diminutives (see §5.7.3), from an earlier word for ‘child’.

It can be used without any preceding noun as in (121), but more commonly serves as the modifier of a kinship term, as in (122) (note also *tr-t̥eu* *kytsa* ‘father and son’ and *tçʰeme kytsa* ‘mother and daughter’ from *tr-t̥eu* ‘son, boy’ and *tçʰeme* ‘girl’).

- 4469 (121) *tce tr-mu* *nui kui u-pu* *nunuu*
 LNK INDEF.POSS-mother DEM ERG 3SG.POSS-young DEM
 4470 *ju-cpʰyrm* *tce, zara kytsa* *ra stusti uja*
 IPFV-flee.with[III] LNK 3PL parents.and.children PL alone completely
 4471 *zo ce-nui* *nui-ra.*
 EMPH go:FACT-PL SENS-be.needed
 4472 ‘And the mother (lioness) flees with her cubs, and they (mother and
 4473 children) have to go alone (without the father).’ (20-sWNgi, 75)
- 4474 (122) *tr-mu* *kytsa* *ci* *pjy-tu-ndzi* *tce*
 INDEF.POSS-mother parents.and.children INDEF IFR.IPFV-exist-DU LNK
 4475 ‘There was a mother and her son.’ (2003 tamukatsa, 1)

Like comitative adverbs (§5.8.1), it is clear that social relation collectives originate from participles of denominal verbs. The only example of the verbal denominal *andzu-* derivation from which they originate is *andziryā* ‘be together as neighbours’ from the inalienably possessed noun *tr-ryā* ‘neighbour’ (§20.2.5). The social relation collective *kyndziryā* ‘neighbours’ can thus be analyzed as the participle of this verb *kui-ryndziryā*.

However, since the *andzi-* denominal derivation attested only in this single example, from a synchronic point of view it is better to consider this collective formation as a strictly nominal derivation.

4485 5.7.8.2 Reduplicated collectives

4486 The reduplicated collectives are built using partial reduplication. There are three
 4487 different patterns.

4488 First, some nouns allow standard partial reduplication with *-u* in the reduplicated
 4489 syllable (§4.1) expressing a vague collective. This reduplication can apply to
 4490 loanwords from Tibetan, such as *χsui~χsyr* ‘things in gold’ and *rju~rjul* ‘things
 4491 in silver’ from *χsyr* ‘gold’ and *rjul* ‘silver’ (Tibetan གསེར gser ‘gold’ and ཅསུ rjul
 4492 ‘silver’).

4493 (123)	<i>a-χsui~χsyr</i>	<i>ra, a-rju~rjul</i>	<i>ra my-ra</i>	<i>kua</i>
	1SG.POSS-COLL~gold	PL 1SG.POSS-COLL~silver	PL NEG-be.needed:FACT ERG	
4494	<i>com rjyskyt u-tab</i>	<i>tu-ce-a</i>	<i>nyu</i>	
4495	iron stairs 3SG.POSS-on IPFV:UP-go-1SG be:FACT			
4496	'I don't need things in gold or silver, I will go up the iron stairs.' (not the golden or silver stairs, 2005-Kunbzang, 215)			

4497 Some nouns, which only appear in a reduplicated form are presumably an-
 4498 cient collectives, like *k^hrambaxtuχtym* ‘lies’ from a possible non-reduplicated
 4499 form **k^hrambaxtym* (from ཁ୍ରମ୍ବାତ୍ୟକ୍ଷଣକ୍ତଃ k^hram.pa.gtam ‘deceiving words’).

4500 Second, we find some reduplicated collectives with the vowel /a/, not /u/, in
 4501 the replicated syllable. There are only a few examples, as shown in Table 5.17,
 4502 but several of them are borrowings from Tibetan. In one case, *fcafcy়* ‘words’,
 4503 the base word is a transitive verb (*fcy়* ‘tell’).

Table 5.17: Collective noun derivation

Base form	Collective	Tibetan
<i>rdul</i> ‘dust, dirt’	<i>rdardul</i> ‘dust, dirt’	རୁଦୁ རୁଦୁ ‘dust’
<i>tui-nt^hur</i> ‘fragment’	<i>u-nt^hant^hur</i> ‘fragments’	
<i>u-zur</i> ‘side’	<i>u-zarzur</i> ‘sides’	ସୁର୍ ཡୁର ‘side, corner’
<i>u-rkuu</i> ‘side’	<i>u-rkarkuu</i> ‘sides’	
<i>fcy়</i> ‘tell’	<i>fcafcy়</i> ‘words’	ଘର୍ମ୍ ବେଦ ‘explain, tell’

4504 Reduplicated collective nouns in *a-* can be used without a number clitic, as in
 4505 (124), but they often appear with the *ra* ‘plural’ as in (125).

- 4506 (124) *znvryama nuu mt^ha uu-kycu nyu. tce numuacu*
 ANTHR DEM ANTHR 3SG.POSS-east be:FACT LNK DEM:PL
 4507 *tuu-ji uu-ntchantchur puu-dyn, jinde k^hro*
 INDEF.POSS-field 3SG.POSS-fragment:COLL PST.IPFV-be:many now much
 4508 *jny-s-qapuu-nuu,*
 IFR-CAUS-be.fallow-PL
 4509 ‘Znargama (‘The place where one calls the rain’) is on the east of Mtha,
 4510 there used to be many little fragments of fields, but now people have left
 4511 them become fallow.’ (150903 kAmYW tWji3, 19)
- 4512 (125) *tce tyci nuu tuu-wy-χtci tc^hyabtc^hyab zo tce,*
 LNK barley DEM IPFV-INV-wash IDPH(II):completely.clean EMPH LNK
 4513 *rdarduul nura jnuu-wy-yx-me tce*
 dush:COLL DEM:PL IPFV-INV-CAUS-not.exist LNK
 4514 ‘Then one washes the barley very thoroughly, one removes all the dirt.’
 4515 (2002tWsqr, 118)

4516 The noun *rgargun* ‘old person’ has the form of a collective noun as those in
 4517 Table 5.17, but it is commonly used with singular or dual referents (as in 126). It
 4518 could be analyzed as the collective form of a loanword from Tibetan རྒା-པྼ རྒାଂ-ପୋ
 4519 ‘old person’, though the expected form would have been †*rga-rgvn*.

- 4520 (126) *rgargun ni ky-fstun puu-ra*
 old.person DU INF-serve PST.IPFV-be.needed
 4521 ‘She had to take care of two old people.’ (14-siblings, 34)

4522 A third reduplicated collective derivation is only attested by one example, the
 4523 form *qajuqaja* ‘all kinds of worms’ (see 127) which derives from *qajuu* ‘worm’ by
 4524 reduplicating the whole word and changing the last rhyme to /-a/, a reduplica-
 4525 tion template reminiscent of that found in Khroskyabs (see Lai 2013, Lai 2017:
 4526 22–24).

- 4527 (127) *tuu-ci uu-ηgwi qajuuqaja t^hamtct, sungwi yuu uu-ruidas*
 INDEF.POSS-water 3SG-inside worm:COLL all forest GEN animal
 4528 *kuu-xtci kuu-wxti, myzu pya numura lonba zo*
 SBJ:PCP-be.small SBJ:PCP-be.big yet bird DEM:PL all EMPH
 4529 *ky-fsraj kuu-ra jnuu-cti ma*
 INF-protect INF:STAT-be.needed SENS-be:AFF LNK
 4530 ‘All the creatures in the water, the small and big animals of the forest,
 4531 and also the birds have to be protected.’ (160703 jingyu, 43)

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4532 A fourth type of collective has the vowel *-e* in the reduplicated syllable. It is
 4533 attested in the noun *w-εŋoŋε* ‘all kinds of diluted drinks’ from *w-εŋo* ‘diluted drink’
 4534 (derived from the verb *εŋo* ‘rinse’).

4535 **5.7.8.3 Dvandva collective**

4536 The *dvandva* collective is derived from two nouns, the first one in *status con-*
 4537 *structus* followed by the element *-l-* and then by the second noun stem without
 4538 a possessive prefix. All known forms, some of which have Tshobdun cognates,²⁷
 4539 are listed in Table 5.18.

Table 5.18: Dvandva collectives

Collective	First noun	Second Noun
<i>tu-kyllympas</i> ‘facial features’	<i>tu-ku</i> ‘head’	<i>tu-mpas</i> ‘eye’
<i>tu-mylyjas</i> ‘limbs’	<i>tu-mi</i> ‘leg, foot’	<i>tu-jas</i> ‘arm, hand’
<i>w-kyllyjme</i> ‘head upside down’	<i>tu-ku</i> ‘head’	<i>tr-jme</i> ‘tail’
<i>kumylyrxso</i> ‘useless’	<i>kui-me</i> ‘not existing’	<i>w-xso</i> ‘empty, normal’

4540 Among the examples in Table 5.18, *w-kyllyjme* ‘head upside down’ and *kumylyr-*
 4541 *xso* ‘in vain’ are mainly used adverbially. The first one mostly occurs with verbs
 4542 such as *ctʰuz* ‘turn towards’ and *ru* ‘look’ at, as in (128).²⁸

- 4543 (128) *tce nui w-sta nui lycʰom nui pjú-wy-εŋo zo*
 LNK DEM 3SG.POSS-place DEM churning.bucket DEM IPFV-INV-rinse EMPH
 4544 *kʰrunj kʰrunj zo qʰe tce w-kyllyjme*
 IDPF:II:completely.clean EMPH LNK LNK 3SG.POSS-head.upside.down
 4545 *pjú-wy-ctʰuz qʰe, w-mju nui pa*
 IPFV:DOWN-INV-turn.towards LNK 3SG.POSS-opening DEM down
 4546 *pjú-wy-ctʰuz*
 IPFV:DOWN-INV-turn.towards
 4547 ‘One rinses the churning bucket very clean, and put it upside down at its
 4548 place, the opening down.’ (30-macha, 66)

4549 The noun *kumylyrxso* ‘useless’, ‘superfluous’, combines the subject participle
 4550 of *me* ‘not exist’ with the property noun *w-xso* ‘empty, normal’ (a lexicalized

²⁷The nouns *tu-mylyjas* ‘limbs’ and *w-kyllyjme* ‘head upside down’ correspond to *o-koljimv* ‘head and tail’ (Sun & Blogros 2019: 533) and *o-metjja* ‘limbs’, respectively (Sun & Blogros 2019: 276).

²⁸See a definition of this noun in (150), §16.2.1.4.

participle, whose uses and etymology are described in §5.1.2.7). It can be used as predicate with a copula (129), but often occurs in adverbial use meaning ‘in vain’, ‘for nothing’ or ‘doing nothing’ as in (130).

- (129) *nuzora kumyllyxso puu-tuu-cti-nuu ma tuu-nyma-nuu maje!*
 2PL in.vain SENS-2-be.AFF LNK 2-work:FACT-PL not.exist:SENS
 ‘You are useless, you don’t do any work.’ (2003 Kunbzang, 322)

- (130) *ndzi-<zuoye> puu-βzu-ndzi ra ma kumyllyxso*
 2DU.POSS-homework IMP-make-DU be.needed:FACT LNK in.vain
ku-tuu-ryzi-ndzi mx-jy
 IPFV-2-stay-DU NEG-be.allowed:FACT
 ‘Do your homework, don’t stay there doing nothing.’ (conversation,
 14-05-10)

The *-ly-/la-* element found in collective *dvandva*-s is also attested in approximate numerals (§7.2) and in adverbs such *tuxpalyskrr* ‘during the whole year’ (from *tuu-xpa* ‘one year’ and *fskrr* ‘turn around’) and *rtsuçarlaymtçrt* ‘all the plants’ (from *rtsuçaj* ‘plant’ and *t^hamtçrt* ‘all’, respectively from Tibetan རྩྲྷ ཆିନ୍: *rtsi.čij* ‘plant’ and རྩྲྷ བྱାଦ୍: *t^hams.tcad* ‘all’). Another possible trace of this *ly-* element is found in the adverb *lyq^hytymb^hrt* ‘(distance of) several mountain ranges’ (131), which contains the noun *tymb^hrt* ‘mountain’ and perhaps the *status constructus* *q^hyr-* from *u-q^hu* ‘after’, ‘behind’.

- (131) *ji-pyrt^hyβ lyq^hytymb^hrt tu*
 1PL.POSS-between several.mountains exist:FACT
 ‘There is a distance of several mountain ranges between us.’ (elicited)

Another linking morpheme *-my-* instead of *-ly-* is found in the possessed noun *u-ŋgumypci* ‘the inside and the outside’ from the locative relator nouns *u-ŋgu* ‘inside’ and *u-pci* (‘the latter from Tibetan ཨླྷ ປ^hି ‘outside’, §8.3.4.2).

5.7.9 Superlative

While there is no adjectival superlative derivation in Japhug (the available constructions to express this meaning are described in §26.4), we find nevertheless a derivation applied to locative nouns (§8.3.4), expressing the furthest location. As shown in Table 5.19, it is built by adding an element *-cua-* followed by a complete copy of the root of the noun without *status constructus* alternation or partial replication; the resulting noun is still an inalienably possessed locative noun. Example (132) illustrates the use of one of these forms.

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Table 5.19: Superlative noun derivation

<i>tu-ku</i> ‘head’, ‘top’	<i>u-kuçuku</i> ‘the highest place’
<i>tr-qa</i> ‘root’, ‘paw’, ‘bottom’	<i>u-qacuqa</i> ‘the deepest place’
<i>u-rku</i> ‘side’	<i>u-rkuçurku</i> ‘the furthest place on the side’
<i>u-zur</i> ‘side’	<i>u-zurçuzur</i> ‘the furthest place on the side’

- 4581 (132) *rjymts^hu u-qacuqa* *pju-ce* *tce, nunu*
 ocean 3SG.POSS-bottom:SUPER IPFV:DOWN-go LNK DEM
 4582 *u-ky-nx-mum* *nura c-tu-nu-tcyt*
 3SG.POSS-OBJ:PCP-TROP-be.tasty DEM:PL TRAL-IPFV-AUTO-take.out
 4583 *nui-ŋu.*
 SENS-be
 4584 ‘(The sperm whale) goes to the lowest depths of the ocean and catches
 4585 the things it likes to eat.’ (160703 jingyu, 24)

4586 5.7.10 Unattested derivations

4587 The only negative morphology possible on Japhug nouns is the privative derivation (§5.7.1). Negative prefixes only occur verbs (§13.1), and the only way to express non-privative negation on nouns is by using a relative clause (§13.4.1).

4590 There is no nominal tense derivation corresponding to the English prefix *ex-*.
 4591 This meaning can only be expressed by participial relatives with the past imperfective participle of the copula *pu-ku-ŋu* (133) (§16.1.1.2).

- 4593 (133) *u-nmas* *pu-ku-ŋu*
 3SG.POSS-husband PST.IPFV-SBJ:PCP-be
 4594 ‘Her ex-husband (the one who used to be her husband).’ (several
 4595 attestations)

4596 In addition, although it is possible to derive abstract nouns from verbs (§16.3,
 4597 §16.4.2, §16.4.7), there is no direct way of deriving an abstract noun from a noun.
 4598 There is however an indirect way of doing it by building a denominal verb, and
 4599 then to subjecting it to a nominalizing derivation. For instance, from the inalienably
 4600 possessed *tr-mdzu* ‘thorn’, the proprietive verb *ayu-mdzu* “be thorny, have a
 4601 lot of thorns” can be derived (§20.2.4) and its (productive) degree noun *u-tu-ryu-
 4602 mdzu* ‘its degree of thorniness’ is well attested in the degree construction (§26.1.2.1)
 4603 as shown in (134).

- 4604 (134) *u-tur-γuu-mdzu* *saxab*
 3SG.POSS-PROP:DENOM-thorn be.extremely:FACT
 4605 ‘It is very thorny (its degree of having thorns is extreme).’ (18-NGolo, 75)

4606 5.8 Denominal adverbs and postpositions

4607 5.8.1 Comitative adverbs

4608 Comitative adverbs are productively derived from nouns. Their meaning is ‘hav-
 4609 ing X’, ‘together with X’, ‘including X’ or in the case of clothes or covers ‘wear-
 4610 ing X’.

4611 Comitative adverbs are built by partially reduplicating the last syllable of the
 4612 noun stem (following the morphophonological rules in §4.1) and prefixing either
 4613 *kṛ-* or *kṛyu-*. This derivation applies to native words and loanwords from Tibetan.
 4614 From instance, *χčrlmuy* ‘glasses’ (from Tibetan ཚླ་མିག *čel.mig* ‘glasses’) yields *kṛ-*
 4615 *χčrlmuy~lmuy* or *kṛyu-χčrlmuy~lmuy* ‘together with glasses; wearing glasses’.²⁹

4616 No semantic difference between the comitative adverbs in *kṛ-* and those in
 4617 *kṛyu-* has been detected: Both are fully productive and can be built from the same
 4618 nouns. As argued in Jacques (2017d), the *kṛyu-* form is inherited (from proto-
 4619 Gyalrong **kṛwə-*), while *kṛ-* is borrowed from Tshobdun *ko-*, the exact cognate of
 4620 *kṛyu-* (Sun 1998: 107). The prefix *kṛyu-* and its Tshobdun cognate *ko-* both origi-
 4621 nate from the participle *ku-* (§16.1.1) of the proprietive *ayu-* denominal derivation
 4622 (§20.2.4.4), attesting a PROPRIETIVE ⇒ COMITATIVE grammaticalization pathway
 4623 (Jacques 2017d).

4624 When the base noun is inalienably possessed, it is possible to build a comi-
 4625 tative adverb with the indefinite possessor prefix or with the bare stem. For in-
 4626 stance, from *tx-rte* ‘hat’ one can derive both *kṛ-rtu~rte* / *kṛyu-rtu~rte* ‘with his/

4627 her hat’ and *kṛ-tx-rtu~rte* / *kṛyu-tx-rtu~rte* ‘with a/the hat’ with the indefinite
 4628 possessor prefix *tx-*. These two sets of forms have different meanings: the former
 4629 *kṛ-rtu~rte* / *kṛyu-rtu~rte* mean ‘wearing one’s hat’ (example 135), while the lat-
 4630 ter *kṛ-tx-rtu~rte* / *kṛyu-tx-rtu~rte* imply that the subject is not wearing the hat
 4631 (136); preserving the indefinite possessor in the derived form alienabilizes the
 4632 inalienably possessed noun (see §5.1.2.9).

²⁹Note that reduplication applies across morpheme boundaries, as the coda of *χčrl* ‘glass’ (from ཚླ ‘*čel*’) is reduplicated with the following syllable.

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- 4633 (135) *kyyu~rtu~rte zo k^ha u~ŋgu~ l^h-tu~ye*
 COMIT-hat EMPH house 3SG-inside AOR-2-come[II]
 4634 ‘You came inside the house wearing your hat.’ (You were expected to
 4635 take it off before coming in, elicited)
- 4636 (136) *laχtc^ha kyyu~ty~rtu~rte zo ta~ndo*
 thing COMIT-INDEF.POSS-hat EMPH AOR:3→3'-take
 4637 ‘He took the hat along with the other objects.’ (Not wearing it, elicited)

4638 The alienabilized comitative adverb *kÿt^hlulu* ‘with milk’ (from *tr~lu* ‘milk’) is
 4639 used as postnominal modifier in ‘milk tea’ (137). The inalienably possessed form
 4640 *kÿlulu* ‘with its milk’ is only compatible with the animal producing the milk (or
 4641 in the case of a plant producing a milk-like juice).

- 4642 (137) *ts^ha kÿ~ty~lu~lu*
 tea COMIT-INDEF.POSS-milk
 4643 ‘Milk tea.’ (30-Com, 94)

4644 Comitative adverbs can be used as sentential adverbs, with scope over the
 4645 whole sentence (examples 135, 136).

4646 They also occur as noun modifiers (as in 137 above), and either follow (137, 138)
 4647 or precede (142, 140) the noun that they modify.

- 4648 (138) *t^h-sno kÿ~ju~ja^h nu~ lu~ta~nu~*
 INDEF.POSS-saddle COMIT-hand DEM IPFV-put-PL
 4649 ‘(Then), they put the saddle with its handles.’ (30-tAsno, 77)

4650 The noun modified by a comitative adverb can have various syntactic func-
 4651 tions in the clauses, including object (137, 138, 140), intransitive subject (139, 142)
 4652 or even transitive subject (141). This last option is not attested in the text corpus,
 4653 but speakers have no trouble producing sentences of this type.

- 4654 (139) *kÿ-snui~sno zo ky~ryŋgu~*
 COMIT-saddle EMPH AOR-lie.down
 4655 ‘(The horse) slept with its saddle.’ (elicited)

- 4656 (140) *kÿ-t^hylwuu~lwa u~zrym ra kuuny c^hú-wy~yut pjú~wy~ji*
 COMIT-earth 3SG.POSS-root PL also IPFV-INV-bring IPFV-INV-plant
 4657 *ri maka tu~lob múa~j-c^ha*
 but at.all IPFV-come.out NEG:SENS-can
 4658 ‘Even if one takes its root with earth (around it) and plant it, it cannot
 4659 grow.’ (15-babW, 121)

- 4660 (141) *lalu ký-rfuu~rfit ra kuu zo βzuu to-ndza-nuu.*
 cat COMIT-offspring PL ERG EMPH mouse IFR-eat-PL
 4661 ‘The cat and its young ate the mouse.’ (elicited)

4662 The comitative adverbs have additional meanings in certain contexts. With
 4663 the verb *fse* ‘be like’, comitative adverbs from body parts occurring with names
 4664 of animals, as in (142) and (143), mean ‘to have a body part that looks like that of
 4665 the other animal’.

- 4666 (142) *pyyk^huu nuu uu-ku nuunu lalu tsa pnu-fse,*
 owl DEM 3SG.POSS-head DEM cat a.little SENS-be.like
 4667 *uu-mtsioβ yyu ma ký-rnuu~rna lalu*
 3SG.POSS-beak exist:SENS a.part.from COMIT-ear cat
 4668 *uu-tuu-fse pnu-syre zo.*
 3SG.POSS-NMLZ:DEG-be.like SENS-be.extremely/be.funny EMPH
 4669 ‘The owl’s head looks a little like that of a cat, apart from the fact that it
 4670 has a beak, it looks very much like a cat with its ears.’ (22-pGAkhW, 7)
- 4671 (143) *li βzuu ký-mtc^huu~mtc^hi ci nuu pnu-fse*
 again mouse COMIT-mouth INDEF DEM SENS-be.like
 4672 ‘(The bat’s) mouth is like that of a mouse.’ (literally ‘It looks like a
 4673 mouse with its mouth.’ 25-qarmWrwa, 12)

4674 Comitative adverbs connected to a noun can occur before the indefinite article
 4675 *ci* ‘a’ as in (143), but this article can also be repeated on both the noun and the
 4676 adverb, as in (§9.1.4.1).

- 4677 (144) *tce nuu jlykruu ci ký-ruu~ri ci pny-rño,*
 LNK DEM rake INDEF COMIT-thread INDEF IFR-borrow
 4678 ‘He borrowed a rake with a thread.’ (140427 qala cho kWrtsAG, 60)

4679 Nouns incorporated into comitative adverbs lose their nominal status and can-
 4680 not be determined by relative clauses (including attributive adjectives), numerals
 4681 or demonstratives. In a sentence such as 145 for instance, the attributive participi-
 4682 al relative [*kuu~kuu-ŋyn*] ‘all the ones who are evil’ does not determine *kryuu-*
 4683 *ŋk^huu~ŋk^hor* ‘with his subjects’, a syntactic structure which would correspond to
 4684 the translation ‘with all his evil subjects’. Rather, it determines the head noun
 4685 together with the comitative adverb *rjylpu kryuu-ŋk^huu~ŋk^hor* ‘the king with his
 4686 subjects’, which implies the translation given below.

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- 4687 (145) *rjylpu kryw-ŋkhua-ŋkhor kuu~kuu-ŋyŋ zo to-ndo tce,*
king COMIT-subjects TOTAL~SBJ:PCP-be.bad EMPH IFR-take LNK
4688 *tcendyre kuu-myku nuu sytčʰa kuu~kuu-sy-scit*
LNK SBJ:PCP-be.before DEM place TOTAL~SBJ:PCP-PROP-be.happy
4689 *zo jo-tsum nuu-ŋu ri kuu-maqʰu tce,*
EMPH IFR-take.away SENS-be LNK SBJ:PCP-be.after LNK
4690 *kuu~kuu-sy-mu zo jo-tsum tce*
TOTAL~SBJ:PCP-PROP-fear EMPH IFR-take.away LNK
4691 ‘She took the king and his subjects, all the evil ones, in the beginning
4692 she took them to nice places, but later she took them to fearful places.’
4693 (2012 Norbzang, 390)

4694 Other denominal adverb formations are also attested in Japhug, but are de-
4695 scribed in the sections on time nominals (§7.5.2) and locational nouns (§8.3.4) in
4696 other chapters.

4697 5.8.2 Reduplicated perative

4698 Partial reduplication of nouns, in addition to the reduplicated collectives (§5.7.8.2),
4699 can also derive location adverbs such as *tʂutʂu* ‘along the road’ from *tʂu* ‘road’
4700 with a perative meaning, as in (146). A similar use of the reduplication appears
4701 in Zbu, but with an additional *kə-* prefix (Gong 2018: 114).

- 4702 (146) *cʰa ra tʂui~tʂu kú-wy-nuu-tsʰi tce*
alcohol PL path~PERLATIVE IPFV-INV-AUTO-drink LNK
4703 ‘One drinks alcohol along the way (back home).’ (2010-histoire10)

4704 Other examples of perative include *wi-jru~jro* ‘following X’s trace’ from *tr-*
4705 *jro* ‘trace’ (see example 74, §19.4.1).

4706 5.8.3 -z suffix

4707 The postposition *baz* ‘while ... still’, which is mainly used in a particular type of
4708 temporal clause (§25.3.4.3), probably originates from the inalienably possessed
4709 noun *tr-ka* ‘free time’ with the fossil locative suffix -z (related to the locative
4710 postposition *zuu*, §8.2.4.1) cognate to Situ -s (Lin 1993: 330–331).

4711 5.8.4 *s-* prefix

4712 The adverbs *st^huci* ‘so much’ (§26.3.1.4) and *st^hamtçrt* ‘so much’ are derived from
 4713 the indefinite pronoun *t^huci* ‘something’ (§6.6.2) and the universal quantifier
 4714 *t^hamtçrt* ‘all’ (§9.1.3.1) by what appears to be a *s-* prefix.

4715 They are attested in derived forms such as *kust^huci* ‘this much’ and *nust^huci*
 4716 ‘that much’ (§26.1.1.3) with the prefixed demonstrative stems *kua-* and *nu-* (§6.9).

4717 The standard marker *star* ‘compared with’ and its variant *sustar* (§8.2.7) are
 4718 clearly related to the locative relator noun *u-tar* ‘on, above’ (§8.3.4.3). The prefix
 4719 *s-* is doubled as *su-s-* in the form *sustar*.

4720 The ultimate origin of the prefix *s-* in the adverbs and postpositions above is
 4721 unclear, but it could be the result of the degrammaticalization of the locative *-s*
 4722 suffix (§5.8.3; this suffix eventually became the locative postposition *zu*, §8.2.4.1)
 4723 and subsequent procliticization to the following host. For instance, in the case of
 4724 *star*, the hypothesized process would be:³⁰

- 4725 1. **X-z (u)-tar* (Suffix)
- 4726 2. **X zə=tar* (Procliticization)
- 4727 3. *X star* (monosyllabification and reanalysis as a postposition)

³⁰The symbol *X* represents a noun phrase. The forms are presented in their Japhug orthography for convenience, but at the stage when this reanalysis happened, the actual pronunciation of the forms in question was probably different.

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6 Pronouns

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6.1 Personal pronouns

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The pronominal system of Japhug distinguishes singular, dual and plural. Alongside free pronouns, a system of pronominal prefixes is used not only to express possession on nouns (§8.2.3.1), but also appears in various non-finite verb forms (§16.1.1.1, §16.1.2.1, §16.1.3.3, §16.2.2, §16.4.6). These prefixes do not distinguish the second and the third person in the dual and plural forms; their use is described in §5.1.1.

Table 6.1: Pronouns and possessive prefixes

	Possessive prefixes	Pronouns (Kamnyu dialect)	Pronouns (Tatshi dialect)
1SG	<i>a-</i>	<i>azo, aj</i>	<i>ŋa</i>
2SG	<i>nɣ-</i>	<i>nɣzo, nɣj</i>	<i>nazō</i>
3SG	<i>u-</i>	<i>uزو</i>	<i>mi</i>
1DU	<i>tçi-</i>	<i>tçizo</i>	<i>tsəžo</i>
2DU	<i>ndzi-</i>	<i>ndzizo</i>	<i>ndzəžo</i>
3DU	<i>ndzi-</i>	<i>zɣni</i>	<i>mindzv</i>
1PL	<i>i-</i>	<i>izo, izora, iżra</i>	<i>jižo</i>
2PL	<i>nu-</i>	<i>nužo, nužora, nužra</i>	<i>əžo</i>
3PL	<i>nu-</i>	<i>zara</i>	<i>mijo</i>
generic	<i>tuu-</i>	<i>tužo</i>	—

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Free pronouns and possessive prefixes are remarkably similar in Kamnyu Japhug. In this dialect, all the pronouns except the third person dual and plural are formed by adding the root *-zo* to the corresponding possessive prefix. In the eastern Japhug dialects (represented by Tatshi in Table 6.1), the 1SG *ŋa* and 3SG *mi* pronouns differ from the corresponding possessive prefixes (the former is possibly borrowed from Situ *ŋā*).

4742 The first and second person singular pronouns *azo* and *nزو* also have the
 4743 shorter monosyllabic forms *aj* and *nڻj*, respectively. These short forms are
 4744 considerably less common in stories (in the reported speech of the characters), but
 4745 appear frequently in free conversations.

4746 Japhug lacks any inclusive/exclusive distinction, unlike other Gyalrongic lan-
 4747 guages such as Tshobdun, Situ or Khroskyabs (see Sun 1998, Lin 1993: 177, Prins
 4748 2016: 92, Lai 2017: 170). Example (1) shows the dual pronoun *tcizo* ‘we (dual)’ in
 4749 inclusive use (it is clear from the context that the son tells his mother to come
 4750 with him), and (2) illustrates the same pronoun in exclusive use. Similar pairs
 4751 of examples can be found with the first plural pronoun *izo* ‘we (plural)’ and its
 4752 variants.

- 4753 (1) *a-mu tcet^ha tcizo kany ce-tci*
 4754 1SG.POSS-mother later 1DU also go:FACT-1DU
 ‘Mother, you and I will go too.’ (2003tWxtsa, 138)
- 4755 (2) *nuzora yuu nur-cymuyduu c^ho kui-fse nuu ui-ts^hyt nuu,*
 4756 2PL GEN 2PL.POSS-gun COMIT SBJ:PCP-be.like DEM 3SG-instead DEM
tcizo yuu tci-trji tui-ldzi pui-tu tce, nuu
 4757 1DU GEN 1DU.POSS-staff one-long.object PST.IPFV-exist LNK DEM
ky-nur-t^huu-tci cti wo
 AOR-AUTO-spread-1DU be:AFF:FACT SFP
 ‘Instead of guns and other things like you, we_{DU.EXCL} only had a staff,
 4758 and we_{DU.EXCL} used it as a bridge (to cross the river).’ (2003kunbzang,
 4759 164)

4761 Third person pronouns can be used with inanimate referents, as the third per-
 4762 son dual *ڙni* in example (3).

- 4763 (3) *tce rŋgur nuu to-k-ymui-rpu-ndzi-ci tce, tcendxre ڙni*
 4764 LNK boulder DEM IFR-PEG-RECIP-bump.into-DU-PEG LNK LNK 3DU
pjy-nui-NGRUI-ndzi
 IFR-AUTO-ACAUS:shatter-DU
 4765 ‘The boulders bumped into each other and they were pulverized.’
 4766 (smanmi4.82-83)

4767 In some contexts, demonstrative pronouns rather than person pronouns are
 4768 used to refer to a third person, even human (see §6.9).

4769 Personal pronouns are not used as head of relative clauses (as in Chinese
 4770 的你 <... de nǐ > ‘you who are ...’), though there are cases of relativization of first
 4771 or second person possessor, as in (4) (§23.5.10.1).

- 4772 (4) *azø nuŋ [a-mu kuŋ-me] ŋu-a tce tce*
 1SG DEM 1SG.POSS-mother SBJ:PCP-exist be:FACT-1SG LNK LNK
 4773 ‘I am someone who does not have a mother.’ (2003Nyimawodzer2, 12)

4774 Personal pronouns can take determiners, in particular the demonstrative *nu* as
 4775 in (4), numerals (§7.1.7) and can also precede a noun in apposition, in expressions
 4776 such as *izo kuruŋ* ‘we, Tibetans’ (5) or *nŋzo qačpa* ‘you frog’ in (6).

- 4777 (5) *izo kuruŋ tce pŋjka tu-nuŋ-ti-j ŋu tce,*
 1PL Tibetan LNK species.of.squash IPFV-AUTO-say-1PL LNK
 4778 ‘We Tibetans call it *pŋjka*.’ (16-CWrNgo, 71)
- 4779 (6) *nŋzo qačpa nŋ-rzaβ cua kuu tú-wy-mbi*
 2SG frog 2SG.POSS-wife who ERG 2-INV-give:FACT
 4780 ‘Who will give you a wife, you frog.’ (2002 qaCpa, 15)

4781 The relationship between the pronouns and the following noun is not neces-
 4782 sarily appositional; for instance, in (7), despite the absence of possessive pre-
 4783 fix on the borrowing 土汉族 <tǔhànzú> ‘local Chinese’, the meaning of *izora*
 4784 <*tuhanzu*> is ‘the local Chinese living among us’ rather than ‘We local Chinese’.

- 4785 (7) *izora <tuhanzu> ra kuu, <qingyang> tu-ti-nuŋ ŋu.*
 1PL local.Chinese PL ERG bharal IPFV-say-PL be:FACT
 4786 ‘The local Chinese among us call it “qingyang”.’ (20-xsar, 40)

4787 As in most languages with polypersonal indexation, pronouns (especially first
 4788 and second person pronouns) are never obligatory, and a finite verb form without
 4789 overt argument NPs is a perfectly well-formed sentence (§22.1). Overt pronouns
 4790 are obligatorily overt as core arguments only when focalized (§22.1.2.3).

4791 Japhug presents a very common subtype of split ergativity: the ergative *ku*
 4792 being obligatory on transitive subject third person pronouns (except in the case
 4793 of the emphatic use of pronouns, §6.4) but optional on first and second person
 4794 pronouns (§8.1.2 and §8.2.2.1).

4795 6.1.1 Honorific plural

4796 The second plural pronoun *nuzo* can be used as honorific pronoun, as in (8),
 4797 where the addressee is unambiguously singular.

- 4798 (8) *wutyz nuzo tčʰi wu-rwuy tuŋ-ŋu-nuŋ?*
 actually 2PL what 3SG.POSS-race 2-be:FACT-PL
 4799 ‘Actually, which type of being are you?’ (2003smanmi, 162)

6 Pronouns

4800 This pronoun correlates with plural honorific indexation *-nuu* (§14.6.1.2). Note
4801 that the plural *ra* also occurs as a honorific marker on nouns (§9.1.1.3).

4802 6.1.2 Personal pronouns as possessive markers

4803 Personal pronouns occur instead of possessive prefixes (§5.1) as first member of
4804 compounds with the adverbs *-suso* ‘as X wish’ (from the verb *suso* ‘think’), as in
4805 example (9) and *-sti* ‘X alone’.

- 4806 (9) *a-zda* *ra zara-suso tu-nuu-nyŋkunŋke-nuu*
1SG.POSS-companion PL 3PL-as.wish IPFV-AUTO-go.here.and.there-PL
4807 *nuu-k^huu*
SENS-be.possible
4808 ‘The other (snakes) can go here and there as they wish.’ (The divination,
4809 43)

4810 The noun *-bra* ‘it is X’s turn to’ can either take a regular possessive prefix, or a
4811 pronoun in *status constructus* form as in (10), where the bound form *nyzy-* occurs
4812 instead of *nyzo* ‘2SG’.

- 4813 (10) *wortc^hi nyzy-βra* *a-tx-tu-ti* *ra*
please 2SG.POSS-turn IRR-PFV-2-say be.needed:FACT
4814 ‘It is your turn to say it.’ (2014-kWLAG, 90)

4815 These constructions are discussed in more detail in §5.1.2.12 and §22.2.2.4.

4816 6.2 Generic pronouns

4817 6.2.1 *tužo* ‘one’

4818 The generic pronoun *tužo* ‘one’ has the same morphological structure as personal
4819 pronouns as seen in the previous section, combining the generic possessive prefix
4820 *tu-* with the pronominal root *-žo*. Note that this generic possessive has to be
4821 strictly distinguished from the homophonous indefinite possessor prefix *tu-* (see
4822 §5.1.3). It has a rare plural variant *tužyra* ‘one’ (see §14.6.1.3, example 166).

4823 In Japhug, sentences have at most one generic human referent (§5.1.3). If this
4824 referent is core argument, the verb has generic indexation (*kua-* for intransitive
4825 subject and object and *wy-* for transitive subject, as in the following example,
4826 §14.3.2.5). The generic argument can be realized as the generic pronoun *tužo* as
4827 in (11) or by a generic noun (such as *turme* ‘person’, §6.2.2).

- 4828 (11) *tuu-zda* *pjúr-wy-z-yvtca*, *tužo* *ntsúr*
 GENR.POSS-companion IPFV-INV-CAUS-be.wrong oneself always
 4829 *pjuu-kuu-zyy-yvñgi* *tce, pui-kuu-nuu-yvtca* *kúny*
 IPFV-GENR:S/O-REFL-be.right LNK AOR-GENR:S/O-AUTO-be.wrong also
 4830 *pjuu-kuu-zyy-yvñgi* *tce, ui-mbryzuu* *kui-tu*
 IPFV-GENR:S/O-REFL-be.right LNK 3SG.POSS-result SBJ:PCP-have
 4831 *me* *tu-kur-ti* *pui-ñu.*
 not.exist:FACT IPFV-GENR-say SENS-be
 4832 ‘If one considers that one’s companion is wrong, and always considers
 4833 himself to be right even if one is wrong, there is can be no good result.’
 4834 (Mouse and sparrow, 80-82)

4835 The generic pronoun can occur before a noun with the generic possessive as in
 4836 *tužo tu-skrt* ‘one’s language’ in example (12); this contributes to disambiguating
 4837 between the indefinite possessive and the generic possessive in the case of in-
 4838 alienably possessed nouns (thus on its own *tu-skrt* can mean either ‘a language’
 4839 or ‘one’s language’).

- 4840 (12) *tcendyre tužo tur-skrt* *zara yui-suixcxt* *pui-ra,*
 LNK GENR GENR.POSS-language 3PL INV-teach:FACT SENS-be.needed
 4841 *zara nui-skrt* *tužo kui-suixcxt* *pui-ra*
 3PL 3PL.POSS-language GENR GENR:S/O-teach:FACT SENS-be.needed
 4842 ‘One has to teach them one’s language, and they have to teach you their
 4843 language.’ (150901 tshuBdWnskAt, 29)

4844 When occurring in A function, the generic pronoun *tužo* obligatorily receives
 4845 the ergative *kui* as in (13) (note that in example 12, although the generic referent
 4846 is A in the first clause, *tužo* does not take ergative because it is a determiner of
 4847 *tu-skrt*).

- 4848 (13) *tužo kui tuu-χti* *pjúr-wy-nuu-car* *kui-maꝝ* *kui,*
 GENR ERG GENR.POSS-spouse IPFV-INV-AUTO-search INF:STAT-not.be ERG
 4849 *tuu-p^hama* *ra kui tuu-χti* *pui-car-nuu*
 GENR.POSS-parent PL ERG GENR.POSS-spouse IPFV-search-PL
 4850 ‘One could not choose one’s spouse, one’s parents chose one’s spouse.’
 4851 (14-siblings, 212-213)

4852 Relator nouns (§8.3), for example the dative *ui-čki* (§8.3.1), are grammaticalized
 4853 from inalienably possessed nouns and like them, take a generic possessive prefix

6 Pronouns

4854 (*tua-cki* or *tua-p^he* ‘to one’) when following *tuzo*, as in example (14), which describes
4855 the Omaha-type skewing rule in the kinship system (§27.5).

- 4856 (14) *tua-ni* *yuu u-rjiti* *nura kuu tuzo tua-cki*
4857 GENR.POSS-FZ GEN 3SG.POSS-child DEM:PL ERG GENR GENR-dat
“*a-rpuw*”, *tx-tcuw* *pui-kui-ŋu* *ny “a-rpuw”*
4858 1SG.POSS-MB INDEF.POSS-son PST.IPFV-GENR:S/O-be if 1SG.POSS-MB
tu-ti-nui, *tc^heme pui-kui-ŋu* *ny “a-tab”* *tu-ti-nui*
4859 IPFV-say-PL girl PST.IPFV-GENR:S/O-be if 1SG.POSS-MZ IPFV-say-PL
kui-ra *ŋu*
4860 INF.STAT-be.needed be:FACT
4861 ‘One’s father’s sister’s children have to call oneself “my maternal uncle” if
one is a boy, “my maternal aunt” if one is a girl.’ (140425kWmdza03, 1)

4862 As examples (11) to (14) illustrate, generic agreement between pronoun, pos-
4863 sessive prefix and verb indexation is very systematic. Examples of 1PL indexation
4864 with generic pronouns or vice-versa are, however, attested (§14.6.1.3).

4865 Due to the constraint against more than one generic argument per clause, the
4866 only case that the generic pronoun can appear two times in the same clause
4867 occurs in reflexive constructions (§18.3), as in (15).

- 4868 (15) *tuzo kuu tuzo tu-kui-nui-zyy-βri* *ra*
4869 GENR ERG GENR IPFV-GENR:S/O-AUTO-REFL-protect be.needed:FACT
4870 *ky-ti nui-ŋu*
4871 INF-say SENS-be
4872 ‘One has to protect oneself.’ (04-qala1, 25)

4871 6.2.2 The generic noun *turme* ‘person’

4872 The noun *turme* ‘person’, also attested to express indefinite humans (§6.6.1) or in
4873 the meaning ‘someone else’ (§6.8), can occur as a marker of generic person, as
4874 in (16).

- 4875 (16) *turme kuu ny tú-wy-ndza sna.*
4876 people also IPFV-INV-eat be.good:FACT
4877 ‘It is also good for people to eat.’ (12-Zmbroko, 31)

4878 In this function, *turme* ‘person’ can be indexed on the verb by either generic
4879 person (as in 16) or 3PL markers, a question explored in more detail in §14.6.2.

4879 There is a slight difference of usage between *turme* ‘person’ and *tuzo* ‘one’
 4880 in clauses with a generic argument. Both can be followed by a noun or a case
 4881 marker taking the generic possessive prefix, as in (17) and (18).

- 4882 (17) *turme tu-fsu* *cantab tu-mbro* *my-cʰa.*
 4883 people GENR.POSS-equal.to until IPFV-be.big NEG-FACT:can
 ‘It cannot grow as big as a person (as oneself).’ (11-qarGW, 24)
- 4884 (18) *w-tu-mbro* *nunu tuzo tu-fsu* *jamar tu-zyuit*
 4885 3SG-NMLZ:DEG-be.high DEM GENR GENR-equal.to about IPFV:UP-reach
 cʰa.
 can:FACT
 4886 ‘As for its size, it can reach one’s (a person’s) size.’ (16-CWrNgo, 18)

4887 However, *turme* ‘person’ as a generic noun can alternatively be used with a
 4888 possessee or a case marker with the third person singular *w-* prefix, as in (19),
 4889 while this option does not exist for *tuzo* ‘one’.

- 4890 (19) *turme w-fsu* *jamar tu-βze* *cʰa.*
 4891 people 3SG-equal.to about IPFV-do[III] can:FACT
 ‘It can grow about the size of a person.’ (12-ndZiNgri, 4)

4892 6.3 Genitive forms

4893 The form of pronouns and personal prefixes undergoes few morphophonological
 4894 changes in combination with postpositions and relational nouns. However,
 4895 in combination with the genitive postposition *yuu* (cf §8.2.3), some personal pro-
 4896 nouns have special forms indicated in Table 6.2.

4897 While some degree of variation exists with dual and plural pronouns (for in-
 4898 stance the regular *izo yuu* is found alongside *izyy* and *izrra yuu*), for the singular
 4899 pronouns only one form is attested.

- 4900 (20) *azuy ndza yu ci nyzuy ndza yu aj*
 4901 1SG:GEN reason be:FACT QU 2SG:GEN reason be:FACT 1SG
múj-tso-a
 4902 NEG:SENS-understand-1SG
 4903 ‘I don’t know if it is because of me, or because of you.’ (that the phone
 line is not working well) (phone conversation, 2011)

Table 6.2: Pronouns and possessive prefixes

Free pronoun	Genitive	
<i>azo</i>	<i>azuγ</i>	1SG
<i>nγzo</i>	<i>nγzuy</i>	2SG
<i>wzo</i>	<i>wzγy</i>	3SG
<i>tçizo</i>	<i>tçizγy</i>	1DU
<i>ndzizo</i>	<i>ndzizγy</i>	2DU
<i>zrn̩i</i>	<i>zrn̩iyu</i>	3DU
<i>iz̩o</i>	<i>iz̩y, iz̩ra γu</i>	1PL
<i>nuzo</i>	<i>nuzγy, nuzγra γu</i>	2PL
<i>zara</i>	<i>zaray, zara γu</i>	3PL

4904 In the genitive forms of the pronouns, the vowel of the genitive marker is
 4905 generally dropped, and the pronominal root *-zo* undergoes vowel change to *-zuy*
 4906 (in the case of first and second person) and *-zγy* (in other forms). Note that *zaray*
 4907 is the only case of the rhyme /ay/ in Japhug.

4908 When genitive pronouns occur as determiners of nouns (including in the pos-
 4909 sessive existential construction, §22.5.2.1), these nouns almost always take a pos-
 4910 sessive prefix coreferent with the genitive pronoun, as in (21).

- 4911 (21) *tcižy* *tci-tʰfkylyyi* *tui-ckat* *pui-tu* *tce, nu*
 1DU:GEN 2DU:plant.ash one-load PST.IPFV-exist LNK DEM
 4912 *ky-nui-χt̩r-tci* *cti* *wo*
 AOR-AUTO-spread-1DU be:AFF:FACT SFP
 4913 ‘We had one load of ash, and we spilled it there.’ (2003 Kunbzang, 171)

4914 The genitive pronouns can be used as possessive pronouns ('mine', 'my own'
 4915 etc) and take the determiner *nu* and the plural *ra*, as in (22) and (23).

- 4916 (22) “*tce ynxsqaptui-rzab* *tu-tsu* *tce pui-βaβ* *ŋu*” *pui-ti-nui*
 LNK twenty.one-night IPFV-pass LNK IPFV-hatch be:FACT SENS-say-PL
 4917 *ri, azuγ nu ynxsqamnuz t̩-rzab* *mχet̩sa pui-nui-βaβ.*
 LNK 1SG:GEN DEM twenty.two one-night until NEG-AOR-hatch
 4918 ‘People say that (chicken eggs) hatch after twenty-one days, mine took
 4919 twenty-two days to hatch.’ (150819 kumpGa)

- 4920 (23) *uizzy nura tu-nuu-yy-βdi tce, cuu-sy-sqyr*
 3SG:GEN DEM:PL IPFV-AUTO-CAUS-be.well LNK TRAL-APASS-hire:FACT
 4921 *my-ra*
 NEG-be.needed:FACT
 4922 ‘He repairs his own (machines) himself, he does not need to ask other
 4923 people.’ (14-siblings, 168)

4924 6.4 The emphatic use of pronouns

4925 In addition to their referential and anaphoric functions, pronouns in Japhug
4926 can be used in an emphatic way in combination with the emphatic particle *zo*
4927 (§26.1.1.5), as in (24).

- 4928 (24) *azo uizo zo k̥y-mto mu-puu-rpo-t-a.*
 1SG 3SG EMPH INF-see NEG-AOR-experience-PST:TR-1SG
 4929 'I never saw it itself.' (24-kWmu, 7)

In combination with the autive *nu-* on the verb, pronouns express the meaning ‘do *X* on one’s own’ (§19.1.3). In the case of transitive verbs, third person pronouns in this function does not take the ergative even if the referent is the transitive subject (example 25, where *tçrt* ‘take out’ is transitive, §22.4.2.3).

- 4934 (25) *tce lu-nuu-ryji-nuu* *tce, nuu-ky-ndza* *nura zara*
LNK IPFV-AUTO-plant.crops-PL LNK 3PL.POSS-OBJ.PCP-eat DEM:PL 3PL

4935 *pjuu-nuu-tcxt-nuu* *pjx-nyu* *tce*
IPFV-AUTO-take.out-PL IFR.IPFV-be LNK

4936 'They planted crops, and earned their food on their own.' (about lepers,
4937 who were settled in the special place by the government, 25-khArWm, 70)

The emphatic pronoun *raj* ‘oneself’ borrowed from Tibetan རྒ ལ രାଜ ‘oneself’, can also be used with any person, though this usage is not very common. It can occur with the autive (26) or without it (27).

- 4941 (26) *nyzo tu-tu-ti* *mx-ra* *ma azo raj*
 2SG IPFV-2-say NEG-be.neededo:FACT LNK 1SG oneself
 4942 *tu-nu-ti-a* *jyy*
 IPFV-AUTO-say-1SG be.possible:FACT
 4943 ‘You don’t need to say it, I can say it myself’ (elicited)

- 4944 (27) *azō ray zo ju-ce-a ra*
 1SG oneself EMPH IPFV-go-1SG be.needed:FACT
 4945 ‘I have to go there myself.’ (150830 afanti-zh, 96)

4946 **6.5 Interrogative pronouns**

4947 The interrogative pronouns in Japhug are indicated in Table 6.3. These pronouns
 4948 are used in independent interrogative clauses (28), in subordinate clauses (29),
 4949 and also in correlatives (30) (§23.2.5), and also occur to express non-specific ref-
 4950 erents (these uses are described in § §6.6.6, after the indefinite pronouns).

- 4951 (28) *tce myzui tc^{hi} puu-ŋu?*
 LNK yet what PST.IPFV-be
 4952 ‘What was there (after this one)?’ (12-ndZiNgri, 100)
- 4953 (29) *wuzo tc^{hi} kui-ŋu nuu ko-tso-nuu tce tce*
 3SG what SBJ:PCP-be DEM IFR-understand-PL LNK LNK
 4954 *c^hí-wy-tcst*
 IFR:DOWNSTREAM-INV-take.out
 4955 ‘They understood what he was, and expelled him (from their group).’
 4956 (140427 hanya yu gezi-zh, 19)
- 4957 (30) *wi-p^hoŋbu tc^{hi} kui-fse nuu, ŋotcu wi-syz-ryzi*
 3SG.POSS-body what SBJ:PCP-be.like DEM where 3SG-OBL:PCP-remain
 4958 *nuunu yuu kui-nuatsa kui-fse jnu-cti tce*
 DEM GEN SBJ:PCP-fit SBJ:PCP-be.like SENS-be:AFF LNK
 4959 ‘The way its body is like is well-adapted to the place where it lives.’
 4960 (19-rNamoN, 24)

4961 In addition to these pronouns, some indefinite pronouns are also marginally
 4962 used in questions, see for instance (87) in §6.6.2.

4963 **6.5.1 *tc^{hi}* ‘what’**

4964 The interrogative pronoun ‘what’ considerably varies across Japhug dialects. In
 4965 Kamnyu we find *tc^{hi}*, apparently borrowed from Tibetan *tc^{hi}*. Neighbouring di-
 4966 alects of Gdongbrgyad area have either *ts^{hi}* (in Mangi) or *t^{hi}* (in Rqaco), which
 4967 represents the original Rgyalrongic root for this interrogative pronoun (cognate
 4968 with Tibetan བ: *tc^{hi}* ‘what’ and Limbu *the*). Even in the Kamnyu dialect, the form

Table 6.3: Interrogative pronouns

<i>tsʰi</i>	'what'
<i>čuu</i>	'who'
<i>tʰystuy</i>	'how many'
<i>tʰyjtču</i>	'when'
<i>ŋotču</i>	'where', <i>ŋoj</i> 'where'
<i>tcʰindža</i>	'why'

4969 *tsʰi*- is directly attested in the indefinite *tsʰitsuku* 'some' (§6.6.3). Mangi Japhug
 4970 shares with Kamnyu the sound change **tʰi* → *tsʰi* which also affects the verb *tsʰi*
 4971 'drink' (this sound change occurred after the pronoun **tʰi* underwent *status con-*
 4972 *structus* alternation to *tʰu*- and was used to build the indefinite pronoun *tʰuci*
 4973 'something', see §6.6.2). Note that Kamnyu Japhug *tcʰi* 'what' is homophonous
 4974 with the noun *tcʰi* 'tree-trunk stairs' attested for instance in example (31) – the
 4975 readers of Japhug texts have to be aware of this potential ambiguity.

- 4976 (31) *com yʃuu kui-mbuu~mbro zo, u-ymbaj zuu tcʰi*
 iron tower SBJ:PCP-EMPH~be.high EMPH 3SG.POSS-side LOC treetrunk.stairs
 4977 *tu-kui-nduu ci puu-tu juu-ŋu*
 IPFV:UP-SBJ:PCP-ACAUS:spread INDEF PST.IPFV-be SENS-be
 4978 'There was a huge iron toward, with a tree-trunk stairs on its side.'
 4979 (Norbzang05, 65)

4980 The Eastern dialects of Gsardzong and Datshang have *xto* instead, a word of un-
 4981 known etymology; these dialects, which share many additional morphosyntactic
 4982 and phonological commonalities, can be collectively referred to as "Xtokavian".

4983 In the Kamnyu dialect, *tcʰi* 'what' is by far the most common interrogative pro-
 4984 noun in the corpus. In interrogative clauses, it can be used to ask about objects,
 4985 non-human animals (32) and names of persons (33), and can occur as prenominal
 4986 determiner meaning 'what (type of)' as in (34).

- 4987 (32) *nŋzo nŋ-mbro nuu tcʰi ŋu*
 2SG 2SG.POSS-horse DEM what be:FACT
 4988 'Who is your horse?' (about a sentient horse, 2003smanmi-tamu, 53)
- 4989 (33) *tcʰi tuu-rmi?*
 what 2-be.called:FACT
 4990 'What is your name?' (heard in context)

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- 4991 (34) *tcendyre myzau tc^{hi} cku tu*
LNK yet what allium exist:FACT
4992 ‘What other (plants of the genus) *Allium* are there?’ (07-Cku, 97)

4993 As in many languages, this interrogative pronoun (instead of the pronoun *cuu*
4994 ‘who’) is also used in questions about classification of persons (Idiatov 2007),
4995 including social affiliation (35, and 29 above) and biological affiliation (47).

- 4996 (35) *utvz nuzo tc^{hi} u-rury tui-ŋu-nua?*
finally 2PL what 3SG.POSS-race 2-be:FACT-PL
4997 ‘Finally, what race (of being) are you?’ (smanmi2003, 172)

4998 There is no specific interrogative pronoun to ask about manner like English
4999 ‘how’, and Japhug expresses this meaning by combining *tc^{hi}* with the verbs *fse*
5000 ‘be like’ or *stu* ‘do like’ (§24.5.7) as in (36).

- 5001 (36) *ny-smyn t̪y-sui-βzu-t-a ri maka*
3SG.POSS-medicine AOR-CAUS-make-PST:TR-1SG but at.all
5002 *máj-pʰyn, tce tc^{hi} zo tú-wy-stu pʰyn*
NEG:SENS-be.efficient LNK what EMPH IPFV-INV-do.like be.efficient:FACT
5003 ‘I had medicine made for you but it does not work, how should we do for
5004 it to work?’ (nyima wodzer 2002, 22)

5005 When used with *tc^{hi}*, the similitative verbs often take an infinitival complement
5006 as in (37).

- 5007 (37) *a-bi, ki kuu-fse t̪ypyom kuu-wxti*
1SG.POSS-younger.sibling this SBJ:PCP-be.like ice SBJ:PCP-be.big
5008 *nutcu, ky-ce tc^{hi} t̪y-tui-fse-ndzi?*
DEM:LOC INF-go what AOR-2-be.like-DU
5009 ‘Sister, how did you cross such a big block of ice?’ (Kunbzang 2005, 156)

5010 The pronoun *tc^{hi}* ‘what’ on its own can occur in questions about the reason or
5011 the purpose of a particular state of affair, as in (38) and (39).

- 5012 (38) *azō tc^{hi} a-pui-ŋu-a?*
1SG what IRR-IPFV-be-1SG
5013 ‘How can it be me?’ (2003sras, 61)

- 5014 (39) *a-tx̌cime, tc^{hi} nuu-tuu-nv̌re ηu?*
 1SG.POSS-lady what SENS-2-laugh be:FACT
 5015 ‘My lady, why are you laughing?’ (Not ‘what are you laughing at?’, 2002
 5016 qaCpa, 102)

5017 When referring to purpose or reason, it is possible to combine *tc^{hi}* ‘what’ with
 5018 the nouns *uu-spa* ‘its material’ and *uu-ndža* ‘its reason’ (as the pronoun *tc^{hi}ndža*
 5019 ‘why’) , as in (40) and (41). Note that examples (39) and (41) are from the same
 5020 story, just a few lines away, in the same context; the construction in (41) is a more
 5021 explicit variant of that in (39).

- 5022 (40) *tce tc^{hi} uu-spa pua-ηu mx-xsi ma tce nuu*
 LNK what 3SG.POSS-material PST.IPFV-be NEG-GENR:know LNK LNK DEM
 5023 *kuu-fse pjy-tu*
 SBJ:PCP-be.like IFR.IPFV-exist
 5024 ‘It is not known what it was for, but there was something like that.’
 5025 (hist140522 GJW, 18)
- 5026 (41) *tc^{hindža} nuu-tuu-yywu ηu?*
 why SENS-2-cry be:FACT
 5027 ‘Why are you crying?’ (2002 qaCpa, 94)

5028 The pronoun *tc^{hi}* takes case marking with genitive *yuu* and the instrumental/
 5029 ergative *kuu*, as in (42).

- 5030 (42) *tce tc^{hi} kuu tu-sui-βze ηu mxksi ma nuu*
 LNK what ERG IPFV-CAUS-make[III] be:FACT NEG-GENR-know LNK DEM
 5031 *kuu-fse nuu, suku ri ku-ndzob ηu*
 SBJ:PCP-be.like DEM top.of.trees LOC IPFV-ACAUS:attach be:FACT
 5032 ‘I don’t what it (the wasp) uses to make it (its nest), it is attached on trees.’
 5033 (26-ndzWrnaR, 55)

5034 In combination with the adverb *jarma* / *jamar* ‘about’, it can be used to indicate
 5035 a quantity, instead of *t^hrstuy* ‘how many’ (§6.5.3), as illustrated by (43), and (44).

- 5036 (43) *tu-ctsam-a tce tc^{hi} jamar zo yyzu kuu?*
 IPFV-measure[III]-1SG LNK what about EMPH exist:SENS SFP
 5037 ‘I will measure it with a scoop to see how much (gold) there is.’ (140512
 5038 alibaba-zh, 59)

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- 5039 (44) *k^htutsa w-ŋgwu tuu-ci tu-rku-nuu tce, nunaŋtcu txe*
 bowl 3SG-inside INDEF.POSS-water IPFV-put.in-PL LNK DEM:LOC sun
 5040 *nuu pjw-su-ntc^byr-nuu tce, tce tc^{hi} jamar ko-ndza nunu, nunu*
 DEM IPFV-CAUS-illuminate-PL LNK LNK what about IFR-eat DEM DEM
 5041 *w-ŋgwu nunaŋtcu pjw-ru-nuu tce, nunaŋtcu tu-rtos-nuu*
 3SG-inside DEM:LOC IPFV:DOWN-look.at-PL LNK DEM IPFV-see-PL
 5042 *pjy-ŋgryl.*
 IFR.IPFV-be.usually.the.case
 5043 'They used to put water in a bowl and let the sunlight reflect into it; they
 5044 could see how much (of the sun) had been occulted ('eaten' by the
 5045 eclipse).' (29-mWBZi, 130)

It is possible to combine *t̪e^{hi} jamar* with a adjective to express approximate comparison, as in (45).

- 5048 (45) *lulul yuu tce uužo u-p^hoŋbu tc^hi kui-zri jamar*
 cat GEN LNK 3SG 3SG.POSS-body what SBJ:PCP-be.long about
 5049 u-jme nua *kuny zri ri*
 3SG.POSS-tail DEM also be.longFACT but
 5050 ‘The cat, its body is about as long as its tail, but...’ (27-qartshAz, 219)

5051 In correlative clauses, the pronoun *tç'hi* ‘what’ can also be used to refer to a
5052 quantity without the adverb *jamar* ‘about’ (example 46).

- 5053 (46) *tx-rjfit tc^{hi} tx-kui-sci nu zo yu-tcxt*
 INDEF.POSS-child what AOR-SBJ:PCP-be.born DEM EMPH INV-take.out:FACT
 5054 *kui-ra pjy-cti tce,*
 INF:STAT-be.needed IPFV.IFR-be:AFF LNK
 5055 ‘However many children were born, one had to raise them.’ (tApAtso
 5056 kAnWBdaR I, 9)

However, in independent interrogative clauses, *tc^hi* ‘what’ cannot refer to quantities. Sentence (47) thus can only mean ‘Was it a boy or a girl’ not ‘How many children did she have?’.

- 5060 (47) *w-rfit* *tc^hi to-sci*
 3SG.POSS-child what IFR-be.born
 5061 'Was it a boy or a girl?' (elicited)

5062 The interrogative *tc^hi* ‘what’ occurs in topicalized clauses with an adjective
 5063 stative verb in perfective form, meaning ‘as for how X it becomes’ as in examples
 5064 (48) and (49).

- 5065 (48) *tc^hi n̥ur-jpum ki c̥antax n̥ur-jpum m̥úaj-c^ha*
 what AOR-be.thick DEM.PROX above IPFV-be.thick NEG:SENS-can
 5066 ‘As for how thick it can grow, it cannot grow thicker than this.’
 5067 (16-CWrNgo, 154)

- 5068 (49) *tc^hi t̥y-mbro, ʂnui-rtsyy c̥antax tu-mbro m̥úaj-c^ha.*
 what AOR-be.tall two-stairs above IPFV-be.tall NEG:SENS-can
 5069 ‘As for how tall it can grow, it cannot grow taller than two stairs.’
 5070 (07-paXCi, 8)

5071 6.5.2 *cuu* ‘who’

5072 The interrogative pronoun *cuu* ‘who’ occurs in questions about the identification
 5073 of a human referent. It can occur in all syntactic roles, and does not have special
 5074 ergative or genitive forms (see examples 51 and 52). It is the probable cognate of
 5075 a etymon widespread in the Trans-Himalayan family (for instance, Tibetan མི་ ‘who’).

- 5077 (50) *ma-tu-n̥uqajy ma cuu tu-ŋu my-xsi*
 NEG:IMP-2-fish LNK who 2-be:FACT NEG-GENR:know
 5078 ‘Don’t fish, I don’t who you are.’ (gesar, 369)

- 5079 (51) *my-ta-mbi nyzo qacpa cuu kua tú-wy-mbi*
 NEG-1→2-give:FACT 2SG frog who ERG 2-INV-give:FACT
 5080 ‘We won’t give her to you, who would give her to you, a frog?’ (2002
 5081 qaCpa, 09)

- 5082 (52) *cuu yuu zo n̥u-k^ham-a ra kuyye?*
 who GEN EMPH IPFV-give:III-1SG be.needed:FACT SFP
 5083 ‘Whom should I give (her) to (in marriage)?’ (140508 benling gaoqiang de
 5084 si xiongdi-zh, 222)

5085 The pronoun *cuu* ‘who’ can be used in one context with non-human referents,
 5086 when asking about which object (out of two or more) has the highest value as to
 5087 a property described by the main verb, as in (53); in this construction, the verb
 5088 receives non-singular indexation (§14.6.1.3), such as the dual *-ndzi* in this example.

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5089 Concerning the use of the ergative *kui* in this sentence see §8.2.7, §26.2.1 and
5090 Jacques (2016b).

- 5091 (53) *nui ny-ku* *tui-tui-rŋŋji* *nui, aki ce-tci*
DEM 2SG.POSS-head 3SG.POSS-NMLZ:DEG-be.long SFP down go:FACT-1DU
5092 *tce, mbro u-jme* *cʰony tú-wy-syfsu,* *cui kui*
LNK horse 3SG.POSS-tail COMIT IPFV-INV-compare who ERG
5093 *jui-zri-ndzi* *kui*
SENS-be.long-DU SFP
5094 ‘Your hair is very long, let us go downstairs, and compare it with a
5095 horse’s tail.’ (2002 qaCpa, 292)

5096 Forms related to *cui* ‘who’ in Japhug include the indefinite pronoun *cuumyçui*
5097 ‘whoever, anybody’ (6.6.4) and *cuunjarura* ‘each better than the other’.

5098 6.5.3 *tʰystuy* ‘how many’ and *tʰyjtçu* ‘when’

5099 To ask about precise quantities, *tʰystuy* ‘how many’ (or ‘how much’) occurs rather
5100 than *tçʰi jamar* as seen above (§43).

- 5101 (54) *nyzo tʰystuy* *tui-kʰym?*
you how.much 2-give[III]:FACT
5102 ‘How much (money) do you give (for it)?’ (Bargaining, 13)

5103 It can be used for any countable quantity, including for people, as in (55).

- 5104 (55) *tsʰupa tʰystuy* *tui-tu-nui* *ŋu?*
village how.much 2-exist:FACT-PL be:FACT
5105 ‘How many (people) are you in the village?’ (conversation, 140501)

5106 The pronoun *tʰystuy* has a conjunct form *tʰystuu-* when used with counted
5107 nouns, including Chinese borrowings (§7.3.1.4). For instance, in (56) and (57), it
5108 occurs with the classifiers *X-maʂ* ‘size of shoes’ (from Chinese 碼 *mǎ*), and in
5109 (57) with the non-nativized form of 点 <diǎn> ‘hour’ (the same meaning can be
5110 expressed without borrowing from Chinese, as in 59).

- 5111 (56) *ny-xtsa* *nui tʰystuu-maʂ* *tu-tui-ŋge* *ŋu*
2SG.POSS-shoe DEM how.many-size IPFV-2-wear[III] be:FACT
5112 ‘What is the size of your shoes?’ (Conversation, 2015)

- 5113 (57) *nuzo nutcu t^hystur-<dian> ḷu?*
 2PL DEM:LOC hour how.many-hour be:FACT
 5114 ‘What time is it at your place?’ (conversation 12-11-2018)

5115 Combined with the noun *tx-rzaꝑ* ‘time’, *t^hystuy* can be used to ask about a
 5116 length of time (58).

- 5117 (58) *nyzo tx-rzaꝑ t^hystuy jamar tx-tsú tce*
 5118 you INDEF.POSS-time how.many about AOR-pass LNK
ky-tui-spa-t?
 5119 AOR-2-be.able-PST:TR
 ‘How long did it take you to learn it?’ (elicited)

5120 The phrase *tx-rzaꝑ t^hystuy* (or alternatively *tutshot t^hystuy*) in collocation with
 5121 the verb *zyut* ‘reach’, is also employed for asking about clock time, as in (59) (see
 5122 §7.5.4) or dates.

- 5123 (59) *tx-rzaꝑ t^hystuy ko-zyut?*
 5124 INDEF.POSS-time how.many IFR-reach
 ‘What is the time?’ (heard in context)

5125 Questions about time can also be expressed by the pronoun *t^hyjteu* ‘when’, as
 5126 in (60) and (61).

- 5127 (60) *t^hyjteu lx-tui-nuye pui-ṇu ra ny?*
 5128 when AOR-2-come.back[II] PST.IPFV-be PL SFP
 ‘When did you come back home?’ (taRrdo conversation, 01)

5129 As shown by (61), *t^hyjteu* ‘when’ can be used with the genitive *yu*.

- 5130 (61) *<jipiao> nu, t^hyjteu yu tx-tui-χtui-t?*
 5131 plane.ticket DEM when GEN AOR-2-buy-PST:TR
 5132 ‘Your plane ticket, for what date did you buy it?’ (conversation,
 2014.03.19)

5133 The pronoun *t^hyjteu* ‘when’ also occurs in the meaning ‘since when’ to express
 5134 impossible events as in (62).

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- 5135 (62) *nɣ-wuu* *kui-rɣrɣit* *jɣ-ari* *kui ci,*
 3SG.POSS-grandfather SBJ:PCP-have.a.child AOR-go[II] SFP QU
 5136 *ty-tcuu* *c^hui-kui-rɣrɣit* *t^hɣjtcu*
 INDEF.POSS-son IPFV-SBJ:PCP-have.a.child when
 5137 *pjɣ-ŋgrɣl?*
 IFR.IPFV-be.usually.the.case
 5138 '(You say) that your father-in-law went away to give birth to a child,
 5139 since when can a man bear children?' (tAwa kWQcraR, 99)

5140 The element *tʰy-* in the pronouns *tʰyjt̪eu* ‘when’ and *tʰystuy* ‘how many’ is the
5141 *status constructus* form of proto-Japhug **tʰi*, the inherited form of the pronoun
5142 ‘what’ (see §6.5.1). The element *-t̪eu* in *tʰyjt̪eu* ‘when’ is related to the locative *t̪eu*
5143 (§8.2.4.1).

⁵¹⁴⁴ The prefixal form *cuustr-* instead of *t^brstuu-* is attested in one story told by Kun-
⁵¹⁴⁵ bzang Mtsho, probably influence from Tshobdun (63).

- 5146 (63) *nymk^ha custy-jom* *ku-nui-tu* *kuye?*
 sky how.many-fathom DUBIT-AUTO-exist SFP
 5147 'How many fathoms (high) is the sky?' (tAwa kWCqraR, 106)

5148 6.5.4 *ŋotçu* 'where'

5149 The interrogative pronoun *ŋotcu* ‘where’ and its variant form *ŋoj* (§8.2.4.4) can
5150 be used to ask either about a location (64), a direction towards (examples 65 and
5151 66) or from (67) a certain place. The second syllable of this pronoun *-tcu* comes
5152 from the locative postposition *tcu*, but the first part is etymologically obscure.

- 5153 (64) *ŋotcu ku-tuu-ryzi?*
 where PRES.EGOPH-2-stay
 5154 ‘Where are you?’ (Conversation, 2005)

- 5155 (65) *ŋot̪eu tu-ce?*
where 2-go:FACT
5156 ‘Where are you going to?’ (Common greeting used when one meets
5157 someone on the road)

- 5158 (66) *qala ηoj nur-ari?*
 rabbit where AOR:WEST-go[II]
 5159 ‘Where did the rabbit go?’ (qala2002, 21)

- 5160 (67) *nuaʒyra ɿotcu jx-tur-ye-nu?* *ɿotcu c-puŋ-tur-tu-nu?*
 2PL where AOR-2-come[II]-PL where TRAL-PST.IPFV-2-exist-PL
 5161 ‘Where are you from? Where have you been?’ (2003sras, 57)

5162 Likewise, with verbs of manipulation, *ɿotcu* can be used both from questions
 5163 about origin (as in 68) or destination.

- 5164 (68) *nunuu ɿotcu ny-jab* *nui-ye* *ŋu,* *ɿotcu jx-tur-yut?*
 DEM where 2SG.POSS-hand AOR-come[II] be:FACT where AOR-2-bring
 5165 ‘Where did you get it from, from where did you bring it?’ (150831 renshen
 5166 wawa-zh, 53)

5167 With the determiner *nū*, the pronoun *ɿotcu* means ‘which (of several places)’,
 5168 as in (69) and (70).

- 5169 (69) *kʰa rayri yuu zo uŋ-ftaŋ pʃr-tu cti ma, tce*
 house each GEN EMPH 3SG.POSS-mark IFR.IPFV-exist be.AFF:FACT LNK LNK
 5170 *ɿotcu nui ŋu, ɿotcu nui maŋ muŋ-pʃr-saxsyl.*
 where DEM be:FACT where DEM be:FACT NEG-IFR.IPFV-be.clear
 5171 ‘There was a mark on each of the houses, and one could not tell which
 5172 (house) was (Alibaba’s) and which was not.’ (140512 alibaba-zh, 189-190)

- 5173 (70) *qapryftsa nunuu, cici jx-ari tce uŋ-ku*
 centipede DEM sometimes AOR-go LNK 3SG.POSS-head
 5174 *ju-z-myke, cici tce uŋ-jme ju-z-myke*
 IPFV-CAUS-be.first[III] sometimes LNK 3SG.POSS-tail IPFV-CAUS-be.first[III]
 5175 *nui-cti tce ɿotcu nui uŋ-ku ŋu, ɿotcu uŋ-jme*
 SENS-be:AFF LNK where DEM 3SG.POSS-head be:FACT where 3SG.POSS-head
 5176 *ŋu, muŋ-pʃr-saxsyl*
 be:FACT NEG.SENS-be.clear
 5177 ‘The centipede, when it moves, sometimes its head goes first, sometimes
 5178 its tail goes first, it is not each to tell which is its head and which is its
 5179 tail.’ (21-qaprAftsa, 12)

5180 With generic nouns such as *turme* ‘person’, *ɿotcu* can serve as prenominal de-
 5181 terminer to mean ‘a person from where’, as in (71).

- 5182 (71) *ɿotcu turme tuŋ-ŋu?*
 where person 2-be:FACT
 5183 ‘Where are you from?’ (2011-05-nyima, 83)

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5184 The pronoun *ŋot̪cu* however has non-spatial uses, in particular to ask about a
5185 particular individual (or a subgroup) within a group, as in (72) and (73).

- 5186 (72) *az̪o a-wa nuu ŋot̪cu zo nuu ŋu kuu?*
1SG 1SG.POSS-father DEM where EMPH DEM be:FACT SFP
5187 ‘Which one is my father?’ (150831 jubaopen-zh, 177)

- 5188 (73) *m̪yžui ŋot̪cu nuu zo syndy m̪y-xsi ma*
more where DEM EMPH be.poisonous:FACT NEG-know:GENR LNK
5189 ‘(Apart from this one), I don’t which other (mushrooms) are poisonous.’
5190 (23-grWBgrWBftsa, 31)

5191 In participial relatives with subject participle (in *ku-*, see §16.1.1.4), *ŋot̪cu* ‘where’
5192 can occur to express relativization of locative adjuncts, as in (74); see §23.2.5 for
5193 a discussion of the other available constructions.

- 5194 (74) *kua-me nura qʰe me, ŋot̪cu kua-tu nua qʰe*
SBJ:PCP-not.exist DEM:PL LNK not.exist:FACT where SBJ:PCP-exist DEM LNK
5195 *kua-dur~dyn tu-łob ŋu.*
SBJ:PCP-EMPH~be.many IPFV-come.out be:FACT
5196 ‘In (places) where it is not found, there is none, but in (places) where it is
5197 found, it grows in great number.’ (21-jmAGni, 91)

5198 The pronoun *ŋot̪cu* ‘where’ is not exclusively used in question about place or
5199 direction, we also find it in the expression in (75).

- 5200 (75) *kuki ŋot̪cu nua-ŋgryl?*
this where IPFV-be.usually.the.case
5201 ‘How could this be possible?’ (qajdoskAt 2002, 32)

5202 This sentence is used to express indignation (as in Chinese 哪有这样的道
5203 理?).¹

6.6 Indefinite pronouns

5205 Japhug has a handful of indefinite pronouns, indicated in Table 6.4. They do not
5206 form a complete paradigm, and other constructions, in particular generic nouns

¹In the story from which it is quoted, the husband says this sentence after his wife, quoting the words of a raven, says that she will have luck, not her husband, who thus reacts in anger.

5207 and free relatives occur to express meanings for which no indefinite pronoun
 5208 exists (see §23.7).

5209 There are no negative indefinite pronouns, and indefinite pronouns are almost
 5210 never under the scope of negation (except in translations from Chinese). They
 5211 also never occur as standard of comparison.²

Table 6.4: Indefinite pronouns

<i>ci</i> ‘one, someone’
<i>tʰuci</i> , <i>tʰutʰyci</i> ‘something’
<i>tsʰitsuku</i> ‘whatever’
<i>çumvçiu</i> ‘whoever, anybody’
<i>ciscʰiz</i> ‘somewhere’

5212 6.6.1 *ci* ‘someone’

5213 There is no indefinite pronoun ‘someone’ in Japhug, but the numeral *ci* ‘one’,
 5214 which has many additional functions (indefinite article, modifier and partitive
 5215 pronoun §9.1.4.1, §6.8, §6.7.2, §9.1.7, §7.1.1 and §22.2.1), can express this meaning
 5216 as in (76) and (77).

- 5217 (76) *uu-l̥cu nuutcu qazo k̥tsa ci, ci kuu*
 3SG.POSS-upstream DEM:LOC sheep parent.and.child INDEF one ERG
 5218 *k̥-ntsye tʰa-yut jui-ŋu.*
 OBJ:PCP-sell AOR:3→3'-bring SENS-be
 5219 ‘Upstream from there, (there was) a ewe and her young, that someone
 5220 had brought them to sell.’ (2003 kandZislama, 202)

- 5221 (77) *tui-xpa tce ci kuu tui-rdoꝝ pjy-sat.*
 one-year LNK one ERG one-piece IFR-kill
 5222 ‘One year, someone killed one of them (wils geese).’ (22-qomndroN, 43)

5223 This use of *ci* is rare. The preferred construction to express the meaning ‘some-
 5224 one’ involves the combination of the generic noun *turme* ‘person’ with the indef-
 5225 itive *ci*.

²Examples such as ‘In Freiburg the weather is better than anywhere in Germany’ (Haspelmath 1997: 2) would not be expressible with an indefinite pronoun.

5226 6.6.2 *t^huci* ‘something’

5227 The indefinite pronoun *t^huci* ‘something’ derives from the *status constructus* of
 5228 the proto-Japhug pronoun **t^hi* ‘what’ (see §6.5.1 above) with the indefinite deter-
 5229 miner and numeral *ci* ‘one’. Note that vowel alternation bleeds the sound change
 5230 /**t^hi*/ → /*ts^hi*/, otherwise a form such as †*ts^huci* would have been expected. Its
 5231 reduplicated form *t^hut^huci* has an irregular vocalism /χ/ (†*t^hut^huci* would have
 5232 been expected instead).

5233 It can designate specific referents, whose nature is known to the speaker but
 5234 unknown to the addressee (as in 78),³.

- 5235 (78) *tu-nusman-a jyy ri, myzui ui-ftcaka tsuku*
 IPFV-treat-1SG be.possible:FACT but yet 3SG.POSS-manner some
 5236 *pjui-tu ra wo, tce t^hut^huci zo pjui-tu*
 IPFV-exist be.needed:FACT SFP LNK something EMPH IPFV-exist
 5237 *ra*
 be.needed:FACT
 5238 ‘I can treat (your illness), but yet another method is needed, something
 5239 (else) is needed.’ (140427 qala cho kWrtAg, 48-49)

5240 The pronoun *t^huci* also occurs to refer to things whose name is unknown to
 5241 the speaker (as in 79 and 80), even if he/she may have seen the object.

- 5242 (79) *tce nur nuu-rte nuu te^hi nyu ma t^huci ci “-za”*
 LNK DEM 3PL.POSS-hat DEM what be:FACT LNK something INDEF ...
 5243 *tu-ti nyu, χsyrza!*
 IPFV-say be:FACT golden.hat
 5244 ‘How is their hat (called), something in ‘za’.... yes, ଖେର୍ବାଁ gser.z^wa ‘golden
 5245 hat’! (30-mboR, 102)

- 5246 (80) *tce tx-ndzuy nui kany, t^huci k^hutsa kuu-fse*
 LNK INDEF.POSS-resin DEM also something bowl SBJ:PCPbe.like
 5247 *uu-ŋgu tu-rku-nuu tce*
 3SG-inside IPFV-put.in-PL LNK
 5248 ‘The resin, people put it into something like a bowl.’ (07-tAtho, 44)

5249 It is also used for non-specific referents whose nature is entirely unknown, as
 5250 in (81) and (82).

³Example (78) is from a tale about a rabbit tricking a snow leopard; the difference of knowledge between the speaker and the addressee concerning the nature of the ‘something’ is crucial to the plot.

- 5251 (81) *tce myzui t^hut^hyci ta-nnuu-rku-nur kuma*
 LNK yet something AOR:3→3'-AUTO-put.in-PL SFP
 5252 ‘They also probably gave them something else.’ (02-deluge2012, 120)
- 5253 (82) *t^hui-mqlab t^hui-mqlab ma t^huci fse ci ndza*
 IMP:swallow IMP:swallow LNK something be.like:FACT INDEF reason
 5254 *c^hui-ce cti*
 IPFV:DOWNSTREAM-go be.AFF:FACT
 5255 ‘Swallow it, swallow it, it comes down (into your throat) for some reason.’
 5256 (2005-stod-kunbzang, 87)

5257 The reduplicated form *t^hu~t^hyci*, especially in combination with *fse* ‘be like’,
 5258 can also mean ‘whatever (happened)’, as in (83).

- 5259 (83) *slama ra yuu t^hut^hyci kui-fse, ky-rr-βzjoz ra*
 student PL GEN something SBJ:PCP-be.like INF-ANTIPASS-learn PL
 5260 *nuu-stu müj-stu-nuu, nuu-stu nuu-nyma-nuu*
 SENS-try.hard-PL NEG:SENS-try.hard-PL 3SG.POSS-right SENS-do-PL
 5261 *müj-nyma-nuu, nuunura nuu-p^hama ra nuu-cki kur-ryfcyt*
 NEG:SENS-do-PL DEM:PL 3PL.POSS-parent PL 3PL-DAT GENR:S/O-tell
 5262 *nuu-ra.*
 SENS-be.needed
 5263 ‘One has to tell the parents whatever concerns the students, whether they
 5264 study seriously and try hard or not.’ (150901 tshuBdWnskAt, 18)

5265 The non-reduplicated form *t^huci* occurs in a correlative construction with the
 5266 form *muci* to mean ‘this and that’, an expression that is used especially in re-
 5267 porting speech from another person when the speaker does not want to bother
 5268 reporting in details the exact words that have been said.

- 5269 (84) *t^huci ny-me-a ra, muuci ny-me-a*
 something do[III]:fact-1SG be.needed:FACT something do[III]:fact-1SG
 5270 *ra*
 be.needed:FACT
 5271 ‘I have to do this and that (so I cannot do X).’ (elicitation)

5272 The pronoun *t^huci* ‘something’ can also occur as head of a relative clause as in
 5273 (80) above with the relative *t^huci k^hutsa kuu-fse* ‘something which is like a bowl’.
 5274 This use is most common in texts translated from Chinese, with the indefinite
 5275 article *ci* ‘one’ (§9.1.4.1) following relative clause, as in (85).

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- 5276 (85) *laχci ci pjut-βzjoz-a, t^huci a-ky-spa ci*
 trade INDEF IPFV-learn-1SG something 1SG.POSS-OBJ:PCP-be.able INDEF
 5277 *a-puu-tu puu-ra*
 IRR-PFV-exist SENS-be.needed
 5278 'I have to learn a trade, to have something I am able to do.' (150902
 5279 luban-zh, 12)

5280 With stative verbs in the relative as in (86), this construction has a low degree
 5281 meaning 'a little X'.

- 5282 (86) *tce kui-wyrum u-ŋguuz kuny t^huci*
 LNK SBJ:PCP-be.white 3SG.POSS-inside:LOC also something
 5283 *kui-ypyulu kui-fse ci ŋu tce,*
 SBJ:PCP-greyish SBJ:PCP-be.like INDEF be:FACT LNK
 5284 '(Silver) is white with a little greyish colour.' (30-Com, 176)

5285 The reduplicated form of the the indefinite pronoun *t^hut^hyci* can be used as
 5286 an interrogative pronoun, as in (87). This construction is similar in meaning to
 5287 Chinese 一些什么 <yīxiēshénme> 'what kinds of things', and is attested in parti-
 5288 cular with the verbs *ti* 'say' and *ra* 'have to, need'. By using this form, the speaker
 5289 implies that the addressee necessarily knows the answer to the question. For in-
 5290 stance, in (87), a sentence from a text enumerating the mountain names in Kam-
 5291 nyu, the names had been written before hand on a piece of paper, and I was
 5292 reading them one by one to Tshendzin; given the fact that the name had been
 5293 written down, it was obvious that I necessarily knew the answer to that question
 5294 (on the use of the Inferential in this example, see §21.5.2.3).

- 5295 (87) *nua u-pa t^hut^hyci to-ti-a?*
 DEM 3SG.POSS-down something IFR-say-1SG
 5296 'What did I say after that?' (140522 Kamnyu zgo, 58)

5297 There are very marginal examples of *t^huci* 'something' used as an indefinite
 5298 prenominal determiner (§9.1.4.2).

5299 The pronoun *t^huci* 'something' can take various modifiers, for instance the
 5300 identity modifier *kumaz* 'other' (§9.1.7) as in (88).

- 5301 (88) *ki mbro ki puu-ky-ntsye tce, [kumaz t^huci]*
 DEM:PROX horse DEM:PROX IPFV-INF-sell LNK other something
 5302 *puu-ky-syndu to-nukryz-ndzi*
 IPFV-INF-exchange IFR-discuss-DU
 5303 'They discussed about selling their horse, and exchanging it for
 5304 something else.' (150822 laoye zuoshi zongshi duide-zh, 41)

5305 No example of *t^huci* with topic markers contributing to mark definiteness such
 5306 as *nū* or *içq^ha* (§9.1.4.3) have been found in the corpus.

5307 6.6.3 *ts^hitsuku* ‘whatever’

5308 The pronoun *ts^hitsuku* ‘whatever’ combines the interrogative pronoun *ts^hi* ‘what’
 5309 (replaced by *te^hi* ‘what’, a borrowing from Tibetan, in Kamnyu Japhug, but still
 5310 attested in Mangi village, see §6.5.1 above) with the mid-scalar quantifier *tsuku*
 5311 ‘some’ (see §9.1.3.2; also found as a partitive pronoun, §6.7.2). Unlike *t^huci* ‘some-
 5312 thing’, is not used for specific referents. Example (89) illustrates its most common
 5313 use. The variant form *t^hitsuku*, without the sound change **t^hi → ts^hi*, is also used
 5314 by speakers of the Kamnyu dialect.

- 5315 (89) *kx-nūr-βluu tce ckryz wuma zo pe ma nūnū, nūnū*
 INF-AUTO-burn LNK oak really EMPH be.good:FACT LNK DEM DEM
 5316 *yuu u-smuumba nū sycke, tcendyre ts^hitsuku kú-wy-sqa tce,*
 GEN 3SG.POSS-flame DEM burning LNK whatever IPFV-INV-cook LNK
 5317 *zaza zo ku-yx-smi c^ha, ts^hitsuku*
 soon EMPH IPFV-CAUS-be.cooked can:FACT whatever
 5318 *tú-wy-sui-rla tce, zaza tu-sui-yle*
 IPFV-INV-CAUS-be.boiling LNK soon IPFV-CAUS-CAUS-be.boiling[III]
 5319 *c^ha.*
 can:FACT

5320 ‘For burning, oak is very good, the flames (from its wood) are very hot,
 5321 whatever one cooks, it cooks it quickly, whatever one boils, it boils it
 5322 quickly.’ (08-CkrAz, 4-5)

5323 In many cases, it is better translated as ‘all kinds of things’, as in (90).

- 5324 (90) *tce nūtcu kūnū u-jas u-ntsi t^hjī*
 LNK DEM:LOC also 3SG.POSS-hand 3SG.POSS-one.of.a.pair staff
 5325 *pjū-sytse u-jas u-ntsi kūn ts^hitsuku*
 IPFV-plant[III] 3SG.POSS-hand 3SG.POSS-one.of.a.pair ERG whatever
 5326 *pjū-z-nymē qhe, zara nū-ndzvts^hi tu-βze, fsapās ra*
 IPFV-CAUS-do[III] LNK 3PL 3PL.POSS-food IPFV-make[III] animal PL
 5327 *nū-ndzvts^hi pjū-βze*
 3PL.POSS-food IPFV-make[III]

5328 ‘Even like that, she supports herself with a staff in one hand, and with the
 5329 other hand she does all kinds of things, makes their food, she makes food
 5330 for the animals.’ (14-siblings, 54)

5331 As other indefinite pronouns, *ts^hitsuku* ‘whatever’ is not normally used with
 5332 negation, but such sentences do occur in the corpus in translations from Chinese,
 5333 as (91). They are not idiomatic Japhug, and only marginally grammatical.

- 5334 (91) *ts^hitsuku mui-to-ti, q^he tcend^hre kui-rŋgu jo-nuice q^he*
 whatever NEG-IFR-say LNK LNK SBJ:PCP-lay.down IFR-go.back LNK
 5335 *ko-nur-rŋgu.*
 IFR-AUTO-lay.down

5336 ‘He did not said anything, went back to sleep and laid down in bed.’
 5337 (150902 qixian-zh, 91)

5338 **6.6.4 *çumrçeu* ‘whoever, anybody’**

5339 There is no indefinite pronoun for human referents ‘somebody’ in Japhug cor-
 5340 responding to *t^huci* ‘something’ – a generic noun with the indefinite determiner
 5341 *ci* ‘one’ such as *turme ci* ‘a man’ is used instead. There is nevertheless a free
 5342 choice pronoun *çumrçeu* ‘whoever, anybody’ (see Haspelmath 1997: 48–52 on
 5343 the differences with universal quantifiers), which, however, is not very common.
 5344 As example (92) shows, it can take the ergative *kui*, and the verb receives plural
 5345 indexation (§14.6.2).

- 5346 (92) *tcaχkyr k^hutsa nuu vo t^ham q^he çumrçeu kui ku-nuu-ntc^hoz-nuu*
 tin bowl DEM ADVERS now LNK anybody ERG IPFV-AUTO-use-PL
 5347 *cti*
 be.AFF:FACT

5348 ‘Now anybody can use tin bowls.’ (unlike before, when only important
 5349 people could use it, 160702 khWtsa, 26)

5350 **6.6.5 *cisc^hiz* ‘somewhere’**

5351 The indefinite pronoun *cisc^hiz* ‘somewhere’ comprises the indefinite *ci* ‘one’ and
 5352 the approximate locative (*s)c^hiz* (see §8.2.4.2). It occurs with or without the loca-
 5353 tive postposition *ri*, as in (93) and (94). It can refer to static location, or motion
 5354 from or towards a direction.

- 5355 (93) *cisc^hiz, tyts^hOB uu-ta_B kui-fse, ty-jtsi uu-ta_B*
 somewhere nail 3SG-ON SBJ:PCP-be.like, INDEF.POSS-pillar 3SG-ON
 5356 *kui-fse, nunura, nunutcu kú-wy-βra_B tce,*
 SBJ:PCP-be.like, DEM:PL DEM:LOC IPFV-INV-attach LNK
 5357 ‘One attaches (their noseband) somewhere, like on a nail, on a pillar.’
 5358 (150902 kAxtCar, 6)

- 5359 (94) *nunu cisc^hiz ri tú-wy-z-nundzui tce nút-wy-ta.*
DEM somewhere LOC IPFV-INV-CAUS-be.vertical LNK IPFV:WEST-INV-put
5360 ‘One puts it vertically somewhere.’ (14-tasa, 62)

5361 **6.6.6 Interrogative pronouns used as free-choice indefinites**

5362 Non-specific free-choice (Haspelmath 1997: 48) indefinite referents can be ex-
5363 pressed by interrogative pronouns in Japhug. Constructions where this function
5364 is attested include correlatives (§23.2.5), as in (95) and universal concessive con-
5365 ditionals (§25.2.3.3) as in (96).

- 5366 (95) *a-purwui, [ŋotcu lx-tui-rŋgwu zo q^he], nutcu*
1SG-donkey where AOR:UPSTREAM-2-lay.down EMPH LNK DEM:LOC
5367 *rŋzi-tci ŋu ma,*
stay:FACT-1DU be:FACT because
5368 ‘My donkey, we will stay wherever you lay down.’ (28-qAjdoskAt, 38)

- 5369 (96) *[t^hyjtcu fsaŋ ky-ta tŋ-ra] zo tce numu*
when fumigation INF-put AOR-be.needed EMPH LNK DEM
5370 *tu-βlur-nui tce,*
IPFV-burn-PL LNK
5371 ‘Whenever there is need to make fumigations, they burn it.’ (15-YaBrWG,
5372 31)

5373 This meaning also occurs in infinitival subordinate clauses, in particular in the
5374 expression *tç^hi kx-c^ha* ‘do whatever *X* can to *Y*’, as in example (97).

- 5375 (97) *[tç^hi kx-c^ha] zo c^hwi-p^hut-nui,*
what INF-can EMPH IPFV-remove-PL
5376 ‘People do whatever they can to remove (this plant).’ (12-Zmbroko, 119)

5377 In both correlative relatives and universal concessive conditionals, the inter-
5378 rogative pronoun often occurs with verb with partial reduplication on the last
5379 syllable of the stem and/or the autive *nui*- prefix (§19.1.4, §25.2.3.3).

5380 With *tç^hi* ‘what’, this construction expresses the meaning ‘whatever; no mat-
5381 ter what’ in intransitive subject (98), object (99) or semi-object (100, see §14.4.2)
5382 functions.

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- 5383 (98) *lú-wy-sti tce tce nuu uu-ŋgur [tc^{hi} puu-nuu-ŋuu~ŋu] nuu*
 IPFV-INV-block LNK LNK DEM 3SG-inside what PST.IPFV-AUTO-be DEM
 5384 *ŋuu-mŋyt múaj-c^ha*
 IPFV-be.spoiled NEG:SENS-can
 5385 ‘One seals (its opening) and whatever (food) is inside will not be spoiled.’
 5386 (150828 kodAt, 14)
- 5387 (99) *[tc^{hi} ty-tuu-nuu-tuu~tuit] zo ju-yi cti*
 what AOR-2-AUTO-say[II] EMPH IPFV-come be.AFF:FACT
 5388 ‘Whatever you say will come.’ (2003twxtsa, 117)
- 5389 (100) *nyzo tc^{hi} kuu-stuu~stu-a zo ŋu*
 2SG what 2→1-do.like-1SG EMPH be:FACT
 5390 ‘Whatever you do to me (will be fine).’ (28-qAjdoskAt, 40)

5391 With *čuu* ‘who’, the construction means ‘whoever; regardless of who; no matter
 5392 who’. Examples are found with the non-specific referent in intransitive subject
 5393 (101), transitive subject (102), or oblique argument (103) functions. Note that it
 5394 often occurs with plural indexation.

- 5395 (101) *tusqar nuu kuu tuurme ra my-kuu-rga maka zo*
 tsampa DEM Tibetan person PL NEG-SBJ:PCP-like at.all EMPH
 5396 *me, [cuu puu-nuu-ŋuu~ŋu] zo, tusqar a-puu-tu q^he,*
 not.exist:FACT who PST.IPFV-AUTO-be EMPH tsampa IRR-IPFV-exist LNK
 5397 *tcendyre, nuu-ky-ndza tu-rtas cti,*
 LNK 3PL.POSS-OBJ:PCP-eat IPFV-be.enough be:AFF:FACT
 5398 ‘Among Tibetan people, everybody likes tsampa (‘there is no one who
 5399 does not like it’), no matter who, if they have tsampa, they have enough
 5400 to eat.’ (2002tWsqr2, 9)
- 5401 (102) *tce [cuu kuu pa-nuu-mtu~mto-nuu] zo kuuki yuu, nuu-k^ha*
 LNK who ERG AOR:3→3'-see-PL EMPH DEM.PROX GEN 3PL.POSS-house
 5402 *yuu nuu-muunto₈ nuu c^hondyre nuu-coŋp^hu nuura tce, myzui*
 GEN 3PL.POSS-flower DEM COMIT 3PL.POSS-tree DEM:PL LNK yet
 5403 *nuu-<c>ai> nuura, pjui-ŋymui-nuu tce,*
 3PL.POSS-vegetable DEM:PL IPFV-praise-PL LNK
 5404 ‘Whoever saw it, the flowers and the trees and the vegetables of their
 5405 house, they praised it.’ (150824 yuanding-zh, 30)

- 5406 (103) *t_ccime ri t_w-rdob ma me, t_cendyre nuzo [c_w yu*
 lady also one-piece apart.from not.exist:FACT LNK 2PL who GEN
 5407 *nur-nu^hu^h-k^hu^h-k^ho-t-a] zo m_új-nutut_{ts}an cti tce,*
 AOR-AUTO-give-PST:TR-1SG EMPH NEG:SENS-be.fair be.AFF:FACT LNK
 5408 ‘There is only one princess, and regardless of whom among you all I
 5409 give her hand to, it will be unfair.’ (140508 benling gaoqiang de si
 5410 xiongdi-zh, 227)

5411 Universal concessive conditionals are found with the pronoun *ŋot̪eu* ‘where’,
 5412 with the meaning ‘no matter where, wherever’ (location or direction from or
 5413 to), as in (104). This free-choice indefinite meaning of *ŋot̪eu* is also found in the
 5414 delocutive expression *ŋyt̪euuk̪rti,k^hu* ‘obey to everything’, where the interrogative
 5415 pronoun occurs in *status constructus* form *ŋyt̪eu-* with the infinitive of *ti* ‘speak’
 5416 (§16.2.1.9).

- 5417 (104) [*ŋot̪eu nū-wy-tu~ta*] zo kuþvz nu^h-βze
 where IPFV-INV-INDEFINITE~put EMPH type.of.bug IPFV-grow
 5418 *nu^h-cti*
 SENS-be.AFF
 5419 ‘Bugs will grow wherever you put (the meat).’ (28-kWpAz, 48)

5420 No example of multiple partitive use of interrogatives (as in French *qui appor-*
 5421 *tait un fromage, qui un sac de noix*, Haspelmath 1997: 177) is attested in the data
 5422 at hand; mid-scalar quantifiers such as *tsuku* ‘some’ occur instead as partitive
 5423 pronouns (§6.7.2).

5424 6.7 Quantifiers

5425 6.7.1 Universal quantifiers

5426 Several quantifiers meaning ‘all’ exist in Japhug (§9.1.3.1). Among them, *krysufse*
 5427 ‘all’ can be used in the meaning ‘everybody’, as in example (105).

- 5428 (105) *krysufse kuu zo ta-nu^h ma^h*
 all ERG EMPH put:FACT-PL not.be:FACT
 5429 ‘Not everybody puts it.’ (160706 thotsi, 21)

5430 The less common form *mnuururi* ‘everybody, each person’ (from Tibetan མི་རྒྱ་
 5431 *mi.re.re* ‘each man’) also serves as a universal quantifier, as in (106).

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- 5432 (106) *mpururi kuu 'numaa pu-pe'* *ntsut to-ti-nuu*
everybody ERG DEM SENS-be.good always IFR-say-PL
5433 ‘Everybody said ‘It is nice!’ (140521 huangdi de xinzhuang, 214)

5434 The interrogative pronoun *tc^{hi}* ‘what’, appears with the plural demonstrative
5435 determiner *kura* to mean ‘everything’, as in example (107). It is not possible to
5436 express meanings such as ‘everybody’ or ‘everywhere’ by combining the other
5437 pronouns *cuu* ‘who’ or *ŋotcu* ‘where’ with the same demonstrative.

- 5438 (107) *užo tc^{hi} kura* *ko-tso*
3SG what DEM:PROX:PL IFR-understand
5439 ‘He understood everything.’ (2002qajdoskAt, 115)

5440 There are several words meaning ‘everywhere’, such as *asvndundyst* ‘every-
5441 where’, but they are treated as adverbs rather than pronouns (§22.2.2.2).

5442 6.7.2 Partitive pronouns

5443 The mid-scalar quantifier *tsuku* ‘some’ is used both as a noun determiner (§9.1.3.2)
5444 and as a partitive pronoun, taking case markers and determiners. This construc-
5445 tion expresses a meaning close to that obtained by combining a relative clause
5446 with an existential verb ('there is someone who...', §22.5.1.2), as can be seen in
5447 (108) where both constructions are used one after the other.

- 5448 (108) *tsuku kuu zgri tu-ti-nuu ŋu, tsuku kuu murkuj*
some ERG plant.name IPFV-say-PL some ERG plant.name IPFV-say-PL
5449 *tu-ti-nuu ŋu. murkuj tu-kuu-ti tci*
plant.name IPFV-SBJ:PCP-say also exist:FACT plant.name
5450 *tu, zgri tu-kuu-ti tci tu ma,*
IPFV-SBJ:PCP-say also exist:FACT LNK
5451 ‘Some call it *zgri*, some call it *murkuj*; there are people who call it *murkuj*,
5452 and also people who call it *zgri*’ (19-qachGa mWntoR, 168)

5453 The quantifier *tsuku* ‘some’ used as a pronoun generally refers to humans in
5454 the corpus, but (109) shows that it can also denote plants for instance.

- 5455 (109) *tsuku ŋav, tsuku aqarŋurje,*
some be.black:FACT some be.light.yellow:FACT
5456 ‘Some are black, some are light yellow.’ (140505 stonka mWntoR, 5)

5457 Numerals (in particular *ci* ‘one’) and also counted nouns (§7.3.2) can be used
 5458 without head noun with a partitive meaning ‘one of (a group)’ as in (110) and
 5459 (111).

- 5460 (110) *ci yuu tx-tciu, ci yuu tc^peme tuu~tyr-tu ny,*
 one GEN INDEF.POSS-son one GEN INDEF.POSS-son COND~AOR-exist LNK
 5461 *uzymy ku-ky-su~bzsu*
 husband.and.wife IPFV-INF-CAUS-make
 5462 ‘If one of them has a boy, and the other one has a girl, let us make them
 5463 husband and wife.’ (zrAntCW 5)
- 5464 (111) *ci t^bur-kui-rgur~rgyz pui-cti tce, ci*
 one AOR-SBJ:PCP-EMPH~be.old C-be.AFF LNK one
 5465 *kui-xtciu~xtci pui-cti tce,*
 AOR-SBJ:PCP-EMPH~be.old C-be.AFF LNK
 5466 ‘One of them has grown very old, and one of them is very small.’
 5467 (2011-05-nyima, 140)

5468 This partitive function is also found in combination with personal pronouns,
 5469 as in (112).

- 5470 (112) *nuzora ci kui a-tuci ci ju-tuu-yuit-nui*
 2PL one ERG 1SG.POSS-INDEF.POSS-water a.little IPFV-2-bring-PL
 5471 *tu-jry*
 QU-be.possible:FACT
 5472 ‘Could one of you bring me some water?’ (150904 zhongli-zh, 51)

5473 6.7.3 Distributive pronouns

5474 The pronoun *zaka* ‘each his own’ and its variant *zakastaka* ‘each his own’ occur
 5475 as pronouns, especially as possessors in an possessive existential construction. It
 5476 can be correlated with a third singular *w-* (113) or a third plural *nui-* (114) prefix
 5477 on the possessum.

- 5478 (113) *tce numuu li qazo nui kui-jas tu,*
 LNK DEM again sheep DEM SBJ:PCP-be.black exist:FACT
 5479 *kui-wyrum tu, kui-yyumuscur kui-fse tu,*
 SBJ:PCP-be.white exist:FACT SBJ:PCP-be.reddish SBJ:PCP-be.like exist:FACT

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- 5480 *kui-xryaulaz* *tu*, *tce numuu zaka* *ui-mdob*
5481 SBJ:PCP-be.blueish exist:FACT LNK DEM each.his.own 3SG.POSS-colour
5482 *tu* *ma*
5483 exist:FACT LNK
‘There are black sheep, white ones, reddish ones, blueish ones, each has
his own colour (they come in all types of colors).’ (05-qaZo, 64-66)
- 5484 (114) *li* *zaka* *nui-rmi* *tu*,
5485 again each.his.own 3PL.POSS-name exist:FACT
‘Each have their own names.’ (150903 tWmNu, 11)

5486 The pronoun *zaka* is built by combining the *status constructus* of the pronominal root *-zo* (§6.1) with the root *-ka* found in the distributive modifier *tuka* ‘each’
5487 (which follows possessums, see §9.1.3.3).

5489 6.8 Identity pronoun

5490 The words *kumaaš* ‘other’ and *kuçte* ‘other’ occur as prenominal determiners (see
5491 §9.1.7, also for a discussion on the etymology of the former), but it can also be
5492 used as a pronoun and take determiners as in (115).

- 5493 (115) *ma kumaaš nura aj müj-suixsal-a* *ri, t̪ykʰepyxtcui nui*
5494 LNK other DEM:PL 1SG NEG:SENS-recognize but bird.sp DEM
5495 *suixsal-a*
5496 recognize:FACT-1SG
‘The other ones I don’t recognize them, but the *t̪ykʰepyxtcui* bird, I do
recognize it.’ (23-scuz, 46)

5497 The interpretation of both *kumaaš* ‘other’ and *kuçte* ‘other’ can be locative
5498 ‘somewhere else’ as in (116), when the main verb (*ta* ‘put’ in this example) selects
5499 a goal or a locative adjunct (since locative noun phrases are often unmarked,
5500 §8.1.8, §8.1.9).

- 5501 (116) *kumaaš/kuçte nui-tua-ta-t* *ŋu* *ui-maaš?*
5502 other AOR-2-put-TR:PST be:FACT QU-not.be:FACT
‘Did you put it somewhere else?’ (elicitation)

5503 Adding the indefinite determiner *ci* ‘one’ is necessary in this context to convey
5504 the meaning ‘something else’:

- 5505 (117) *kumas/kuac̚te ci nuu-tur-ta-t nyu ui-mas?*
 other INDEF AOR-2-put-TR:PST be:FACT QU-not.be:FACT
 5506 ‘Did you put something else?’ (elicitation)

5507 Example (118) illustrates that both *kumas* and *kumas ci* can occur in the mean-
 5508 ing ‘another one’ in some contexts (here with the verb *çar* ‘search’).

- 5509 (118) *χsu-sŋi my-kur-ts qʰe li kumas ci ju-yuat qʰe,*
 three-day NEG-INF:STAT-pass LNK again other INDEF IPFV-bring LNK
 5510 *li ui-zda nuu-nui-car nuu-cti. tce nuunu*
 again 3SG.POSS-companion IPFV-AUTO-search SENS-be.AFF LNK DEM
 5511 *maka kuujka nuu ɻyn ma, ui-zda nuu*
 completely pyrrhocorax DEM be.evil:FACT LNK 3SG.POSS-companion DEM
 5512 *nui-me ui-qʰu my-kui-nyrzak tce kumas*
 AOR-not.exist 3SG.POSS-after NEG-INF:STAT-spend.time LNK other
 5513 *nui-car nuu-cti tce müij-pe tu-ti-nuu*
 IPFV-search SENS-be.AFF LNK NEG:SENS-be.good IPFV-say-PL
 5514 *ŋgryl.*
 be.usually.the.case:FACT
 5515 ‘Not even three days (after hunters kill its mate, the *Pyrrhocorax*) brings
 5516 another one, it looks for another mate. People say that the *Pyrrhocorax*
 5517 is not nice, because not long after its mate has died, it looks for another
 5518 one, it is not good.’ (22-CAGpGa, 84)

5519 The indefinite *ci* ‘one’ combined with the demonstrative determiner *nui* (or
 5520 *nuunu*) has the meaning ‘the other one’ (the definite counterpart of *kumas* ‘other’),
 5521 as in (119) and (120).

- 5522 (119) *tce ui-jas kui ki tu-ste*
 LNK 3SG.POSS-hand DEM:PROX IPFV-do.like[III] IPFV-reach.into[III]
 5523 *lu-z-naŋje nui-ŋu ri, tce ci nuu kui ui-jas*
 SENS-be but LNK INDEF DEM ERG 3SG.POSS-hand IPFV-bite
 5524 *ku-mtsuy nui-cti qʰe,*
 SENS-be.AFF:FACT LNK
 5525 ‘(The cat) reaches with its paw (into the whole) like this, but the other
 5526 one (the weasel) bites its paw.’ (27-spjaNkW, 48)

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- 5527 (120) *w-me bnuaz pjy-tu tce, tuu-rdoꝝ nuu χsyrl̥smyn*
 3SG.POSS-daughter two IFR.IPFV-exist LNK one-piece DEM gser.la.sman
 5528 *pjy-rmi, ci nuu rŋul̥smyn pjy-rmi tce,*
 IFR.IPFV-be.called INDEF DEM dngul.la.sman IFR.IPFV-be.called LNK
 5529 ‘He had two daughters, one of them was called Gser.la.sman, and the
 5530 other Dngul.la.sman.’ (2003-kWBRa, 1-2)

5531 Alternatively to the construction in (120) with *tuu-rdoꝝ* ‘one piece’ and *ci nuu* to
 5532 express the meaning ‘one of them and the other ...’, it is possible to use *ci nuu*
 5533 two times in the same sentence to refer to more than one persons or animals, as
 5534 in (121).

- 5535 (121) *tce ci nuunu ju-ce uu-k^huuk^ha ci nuu kuu uu-pu*
 LNK INDEF DEM IPFV-go 3SG-while INDEF DEM ERG 3SG.POSS-intestine
 5536 *tu-ndze, c^huu-ryci.*
 IPFV-eat[III] IPFV-pull
 5537 ‘While one of the two (the prey) is (still) going, the other one (the
 5538 predator) eats and pulls its intestine.’ (20-Rmbron, 76)

5539 The dual *ci nuni* ‘the other two’ and plural *ci nura* ‘the other ones’ are also at-
 5540 tested, as in (122), showing that *ci* is here completely bleached of numeral mean-
 5541 ing.

- 5542 (122) *ci numi yuu nuu, ndzi-ta-mar rjyyi*
 INDEF DEM:DU GEN DEM 3DU.POSS-INDEF.POSS-butter tsampa
 5543 *pjy-ŋu tce tce nuunu uizo kuu to-ndza*
 IPFV.IFR-be:FACT LNK LNK DEM 3SG ERG IFR-eat
 5544 ‘The tsampa of the other two (sisters) was butter tsampa, and she ate it.’
 5545 (2003-kWBRa, 20)

5546 It is also possible in this function to use other modifiers such as numerals, as
 5547 in (123) with *χsum* ‘three’.

- 5548 (123) *icq^ha ci χsum nuu muu-jo-yi-nuu kuu*
 the.aforementioned INDEF three DEM NEG-IFR-come-PL ERG
 5549 ‘The three other ones, without coming, (said...)’ (140515 congming de
 5550 wusui xiaohai-zh, 45)

5551 As a prenominal determiner, *ci* also has the meaning ‘the other X’ (see §9.1.7).
 5552 Finally, the noun *turme* ‘person’ (which also occurs to express generic person,
 5553 §6.2.2) can be used in the meaning ‘someone else’ or ‘other people’, in particular
 5554 in genitival constructions as in (124).

- 5555 (124) *turme u-kʰvpa zuu, ki kur-fse tur-rzaš*
 people 3SG.POSS-yard LOC DEM.PROX SBJ:PCP-be.like one-night
 5556 *lu-znufsɔŋspat-a ku-omdzui-a.*
 IPFV-do.the.whole.night-1SG IPFV-sit-1SG
 5557 'I would spend an entire night from dusk till dawn sitting in someone
 5558 else's animal yard.' (2010-histoire09, 34)

5559 6.9 Demonstrative pronouns

5560 There are two basic demonstratives in Japhug, the proximal *ki* 'this' and the dis-
 5561 tal one *nu* 'that', which also occur as demonstrative determiners (see §9.1.2).
 5562 Table 6.5 illustrates the various demonstrative pronouns that are derived from
 5563 these basic forms, with reduplicated and emphatic forms. There is in addition a
 5564 cataphoric pronoun *n̥ki*, discussed in §6.9.2.2.

5565 Plural and dual forms, as in the case of determiners, are formed by adding *-ra*
 5566 and *-ni* suffixes (§9.1.1) to the demonstrative root, which undergoes *status con-*
 5567 *structus* change /i/ → /u/ in the case of proximal demonstratives. Plural forms
 5568 are given in the table; dual forms are attested but rare and can be predicted (*kuni*
 5569 'these two' etc).

Table 6.5: Demonstrative pronouns

	Base form	Reduplicated	Emphatic
Proximal, singular	<i>ki</i>	<i>kuuki</i>	<i>uukuki</i>
Distal, singular	<i>nu</i>	<i>nunuu</i>	<i>uununu</i>
Proximal, plural	<i>kura</i>	<i>kuukura</i>	<i>uukukura</i>
Distal, plural	<i>nura</i>	<i>nunura</i>	<i>uununura</i>

5570 The distal demonstratives, being the default forms, are simply glossed as DEM
 5571 in the examples: only proximal demonstratives are explicitly marked as such in
 5572 the glosses.

5573 6.9.1 Anaphoric demonstrative pronouns

5574 The basic demonstratives *ki* and *nu* are less often used as pronouns than the other
 5575 ones (they mainly occur as determiners). They nevertheless do occur in all syn-
 5576 tactic functions, including object (in particular with the verb *ti* 'say', as in 125,

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5577 where it refers to words that have been previously told to another animal), and
5578 semi-object (in particular with the verb *stu* ‘do like’ as in 126).

5579 (125) *li nuu to-ti ri*,
again DEM IFR-say LNK

5580 ‘(Gesar) said the same thing to the (snow leopard).’ (gesar, 286)

5581 (126) *wi-mu nuu ku-rqob tce ki tu-ste tce*
3SG.POSS-mother DEM IPFV-hug LNK DEM:PROX IPFV-do.like[III] LNK
5582 ‘It hugs its mother like that.’ (19-GzW, 30)

5583 The distal demonstratives *nuu* and *nunu* serve as anaphoric pronouns with any
5584 type of referent, including humans, but also abstract concepts, inanimate objects
5585 or plants as in (127), though as mentioned in §6.1, third person pronouns such as
5586 *wizo* ‘he’ can also have inanimate antecedents.

5587 (127) *tsʰa kx-nuu-ta tx-ra, smi kx-βluu tx-ra*
tea INF-AUTO-put AOR-be.needed fire AOR-burn AOR-be.needed
5588 *pui-nui-ηu, tʰamaka sko-nuu pui-nui-ηu, tce*
PST.IPFV-AUTO-be tobacco smoke:FACT-PL PST.IPFV-AUTO-be LNK
5589 *nunu kuu smi tu-sai-tcxt-nuu.*
DEM ERG fire IPFV-CAUS-take.out-PL

5590 ‘When they need to boil tea, to make a fire or smoke tobacco, people
5591 light up the fire with it.’ (15-babW, 226-229)

5592 When a third person mentioned in a discussion is present, the pronoun *wizo*
5593 ‘he’ is not the optimal way of referring to him/her, and a proximal demonstrative,
5594 in particular the reduplicated *kuki* ‘this one’, is used instead. It can occur to
5595 present someone to someone else (128) (note that a similar usage exists in West-
5596 ern languages such as English in the same context) and even to talk about the
5597 actions of this person, as in (129) and (130).

5598 (128) *kuki a-slama ηu*
DEM.PROX 1SG.POSS-student be:FACT
5599 ‘This a (former) student of mine.’ (conversation 140510, 17)

5600 (129) *kuki kuu ta-βzu?*
DEM.PROX ERG AOR:3→3'-make
5601 ‘Did she make it?’ (conversation 140510, 152)

5602 As other pronouns (see §6.1), demonstrative pronouns can take the demonstrative determiner *nuu*, as in (130).

- 5604 (130) *mua~mr-puu-jyy tce mr-yi-tci ma*
 COND~NEG-PST.IPFV-be.acceptable LNK NEG-COME:FACT-1DU LNK
 5605 ***kua*** ***nuu*** *fstun-tci ra ma tci-βye*
 DEM:PROX DEM SERVE:FACT-1DU BE.NEEDED:FACT LNK 1DU.POSS-orphan
 5606 *u-ku t^huu-kua-γyrndi*
 3SG.POSS-head AOR-SBJ:PCP-support
 5607 ‘If it is not possible (to take the old man with us) we will not come, as
 5608 we have to serve him, he is the one who adopted us orphans when we
 5609 were in dire straits.’ (The old man is presumably present when this
 5610 sentence is uttered; 2003nyima2, 122)

5611 The emphatic demonstrative pronouns (which are also used as determiners,
 5612 §9.1.2) are built by combining the reduplicated forms of demonstratives with the
 5613 third person possessive prefix *u-*. They are about fifty times less common than
 5614 corresponding reduplicated forms, but their function is essentially the same. In
 5615 (131), *uunumuu* is an anaphoric pronoun whose antecedent is present in the imme-
 5616 diately preceding clause.

- 5617 (131) *tce uu-rq^hu kua-fse ci γyzu tce, uunumuu kua*
 LNK 3SG.POSS-hull SBJ:PCP-be.like INDEF EXIST:SENS LNK DEM:EMPH ERG
 5618 *u-rdu nuu tu-εu-fkaβ kua-fse juu-ηu.*
 3SG.POSS-eyeball DEM IPFV-CAUS-COVER SBJ:PCP-be.like SENS-be
 5619 ‘It has something like a membrane, and it covers its eyeball with it.’
 5620 (description of the nictitating membrane of birds, 140513
 5621 sWNgWrmABja, 9)

5622 The demonstrative *nuu* may not refer anaphorically to a particular entity , but
 5623 also to an entire situation, as in (132) where it occurs as an adjunct in absolute
 5624 form, meaning ‘this way, like that’ (in another version of the same story, we find
 5625 *nuu kua-fse* ‘like that’ instead of *nuu* in the same context).

- 5626 (132) *nunua u-mjuu nuutcu zuu li, qapri, nyki, kua-jaε*
 DEM 3SG.POSS-bank DEM:LOC LOC again snake FILLER SBJ:PCP-be.black
 5627 *nuu kua-wyrum nuu u-qiuu zo c^hy-mqlas tce*
 DEM ERG SBJ:PCP-be.white DEM 3SG.POSS-half EMPH IFR-swallow LNK

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- 5628 *nua pjy-rvzi-ndzi.*
5629 DEM IFR.IPFV-stay-DU
5630 ‘On the bank (of the lake), there was again a black snake that had
5631 swallowed half of a white snake, and they were staying (stuck) like that.’
(28-smAnmi, 104)

5632 6.9.2 Medial and cataphoric pronoun

5633 6.9.2.1 Medial demonstrative

5634 In addition to the proximal and distal demonstratives, there is a considerably
5635 rarer medial demonstrative *nyki*, in examples such as (133) and (134), which means
5636 ‘your place, near you’, as opposed to ‘here’.

- 5637 (133) *kutcu ko-qanu p^ho₈p^ho₈ zo, nyki*
5638 DEM.PROX:LOC IFR-be.dark IDPH(II):completely EMPH DEM:MEDIAL
nuitcu u₁-kó-qanu?
5639 DEM:LOC QU-IFR-be.dark
5640 ‘Here it is already dark, is it (also) dark in your place?’ (conversation,
14.12.24, referring to the time lag between Paris and Mbarkham)
- 5641 (134) *ki kura nua-k^ham-a tce nyki nua azuay*
5642 DEM:PROX DEM:PROX:PL IPFV-give-1SG LNK DEM:MEDIAL DEM 1SG:GEN
nua-k^hym je
5643 IMP-give SFP
‘I give (you) these (toys), give me that one.’ (2012 Norbzang, 135)

5644 The medial demonstrative *nyki* can be historically analyzed as a combination
5645 of the proximal demonstrative *ki* with the second person possessive *ny-*. How-
5646 ever, equivalent dual or plural forms such as †*ndziki* or †*nuki* are impossible (the
5647 equivalent meaning can only be expressed with the dative, using a form such as
5648 *ndzizo ndzi-p^he* ‘at your_{du} place’, §8.3.1).

5649 6.9.2.2 Cataphoric pronoun

5650 In addition to its function as a medial demonstrative (§6.9.2.1), the demonstrative
5651 *nyki* also occurs to express cataphoric reference. It occurs especially when the
5652 speaker hesitates and uses it as a filler, followed by a clause with the same verb
5653 (examples 135 and 136) or just with the same auxiliary (137).

5654 (135) *qra nua kuu, mbala na-lyt ny tce nyki*
 female.yak DEM ERG male.young.bovid AOR:3→3' LNK LNK DEM:CATAPH
 5655 *jnu-ŋu, jla jnu-ŋu,*
 SENS-be male.hybrid.yak SENS-be
 5656 ‘When a female yak has a young (with a bull), it is..., it is a hybrid yak.’
 5657 (05-qambrW, 64)

5658 (136) *tce nur tur-ci yuu u-taŋ numutcu, nyki*
 LNK DEM INDEF.POSS-water GEN 3SG-ON DEM:LOC DEM:CATAPH
 5659 *ny-χtyr, icq^ha <yujinxiang> ky-ti muntoŋ nu*
 IFR-spread the.aforementionned tulip OBJ:PCP-say flower DEM
 5660 *yuu u-jwaa nua ny-χtyr.*
 GEN 3SG.POSS-leaf DEM IFR-spread
 5661 ‘She spilled on the water... she spilled the petals of the flower called
 5662 “tulip”. (150818 muzhi guniang-zh, 69)

5663 (137) *tce nur-nuŋa ra nyki nyu ci, tce*
 LNK 2SG.POSS-COW PL DEM:CATAPH be:FACT QU LNK
 5664 *jnu-tur-nym q^he, tce zara ku-n-nua-yi-nua*
 IPFV:WEST-2-chase[III] LNK LNK 3PL IPFV:EAST-AUTO-VERT-come-PL
 5665 *nyu ci?*
 be:FACT QU
 5666 ‘And your cows, are they (still) like that, you let them out of the pen (in
 5667 the morning), and they come back home on their own (in the evening)?’
 5668 (taRrdo conversation, 28-29)

5669 It is also used when the speaker alerts the addressee that a long description fol-
 5670 lows as in (138), as in English ‘(he said) the following’. Given the fact the Japhug
 5671 is strictly verb-final and has pre-verbal complements (§22.1.1), this is a strategy
 5672 employed to avoid relegating the main verb to the end of the description.

5673 (138) *k^hopi kuu nqiazwyr ci jnu-mum rca*
 ANTHR ERG bitter.wormwood INDEF SENS-be.tasty UNEXPECT
 5674 *jnu-saχaab zo tce nyki tu-stu-nua jnu-ŋu*
 SENS-be.extremely EMPH LNK DEM:CATAPH IPFV-do.like-PL SENS-be
 5675 *jnu-ti, jnu-p^hut-nua q^he kuu-zri... ki jamar zo*
 SENS-say IPFV-take.out-PL LNK SBJ:PCP-be.long DEM:PROX about EMPH
 5676 *kuu-zri jnu-p^hut-nua q^he nyki, u-ku*
 SBJ:PCP-be.long IPFV-take.out-PL LNK DEM:CATAPH 3SG.POSS-head

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- 5677 *u-*mitu** *kur-fse* *nutcu* *kú-wy-ndo* *q^he tce*
3SG.POSS-crest SBJ:PCP-be.like DEM:LOC IPFV-INV-take LNK LNK
- 5678 *u-*pa** *nui, u-jwa₂* *nui* *c^hu-χcos-nui*
3SG.POSS-under DEM 3SG.POSS-leaf DEM IPFV:DOWNSTREAM-take.out-PL
- 5679 *nui-ŋu...*
SENS-be
- 5680 ‘Kebei says that bitter wormwood is very tasty, and that they prepare it
5681 in the following way: they pluck (wormwoods) that are this big, take it
5682 by something that looks like a crest on the top, and prune away the
5683 leaves under it... (continued by several paragraphs)’ (conversation
5684 140510)

5685 The pronoun *nyki* is also used as a determiner (§9.1.2) and the speech filler *nyk-*
5686 *inu* (§10.3) derives from the combination of *nyki* with the determiner *nui*. There
5687 are no plural or dual forms of *nyki*, but it can be combined with dual or plural
5688 determiners as in (139).

- 5689 (139) *tce nyki* *nura, mk^hyrman₂ ra pjv-ruususo-nui tce,*
LNK DEM:CATAPH DEM:PL people PL IFR-think-PL LNK
5690 ‘And these, the people thought about it.’ (150829 jidian-zh, 138)

5691 It is likely that the cataphoric demonstrative use of *nyki* derives from its function
5692 as a medial demonstrative, suggesting the historical pathway in (140).

- 5693 (140) 2SG+DEM:PROX ⇒ DEM:MEDIAL ⇒ DEM:CATAPHORIC ⇒ SPEECH FILLER

5694 6.9.3 Locative forms of the demonstrative pronouns

5695 The locative postposition *tçu* (§8.2.4.1) can be combined with the demonstrative
5696 pronouns *nui* and *ki* and their reduplicated and emphatic forms, as shown in
5697 Table 6.6.

5698 The locative pronouns in *-tçu* can be followed by the postposition *zui* as in (141),
5699 but not by the locative *ri*.

- 5700 (141) *mbrosta ci tu tce, nutçu zui mbro nui*
stable INDEF exist:FACT LNK DEM:LOC LOC horse DEM
5701 *a-ja.*
PASS-keep.attached:FACT
5702 ‘There are stables (in this palace), and the horse is kept there.’ (140507
5703 jinniao, 174)

5704 The proximal demonstrative *ki* undergoes *status constructus* (§5.4) alternation
 5705 and changes to *ku-* when combined with the locative postposition *tçu* (§8.2.4.1),
 5706 with further assimilation to [u] due to the regressive vowel assimilation (§3.3.1.2)
 5707 when followed by *-tçu*.

5708 In addition to the locative pronouns in *-tçu*, there is an entirely parallel series
 5709 of pronouns in *-re*; this suffix is probably unrelated to the locative postposition *ri*,
 5710 and may rather reflect the plural marker *ra* (which can be used to mark vague lo-
 5711 cation, see §9.1.1.2) with the proto-Gyalrong locative suffix *-j and regular vowel
 5712 fusion (§8.2.4.4). These locative pronouns are much less commonly used in the
 5713 corpus than those of the *-tçu* series.

Table 6.6: Locative demonstrative pronouns

	Base form	Reduplicated	Emphatic
PROX.SG	<i>kutçu</i>	<i>kukutçu</i>	—
DIST.SG	<i>nutçu</i>	<i>nunutçu</i>	<i>ununutçu</i>
PROX.SG	<i>ku're</i>	<i>kukure</i>	—
DIST.SG	<i>nu're</i>	<i>nunure</i>	<i>ununure</i>

5714 Locative pronouns in *-re* can appear on their own as in (142), or with the loca-
 5715 tive postposition *ri* as in (143), but never with the other postpositions *zuu* and
 5716 *tçu*.

- 5717 (142) *az̥o muu-puu-ryži-a, ku're puu-cti-a.*
 1SG NEG-PST.IPFV-stay DEM.PROX:LOC PST.IPFV-be.AFF-1SG
 5718 ‘I was not present (there), I was here.’ (conversation140510 , 84)
- 5719 (143) *tce kukutçu, <zhuanmen>, nr̥kinu, tu'-cya*
 LNK DEM.PROX:LOC specially FILLER INDEF.POSS-tooth
 5720 *wu-kui-nuusmyñ, tcet^bi, nduuc^hu kure ri*
 3SG.POSS-SBJ:PCP-treat downstream west:APPROX.LOC DEM.PROX:LOC LOC
 5721 *ryži ma, nunu wuma zo mk^hyz tce,*
 stay:FACT LNK DEM really EMPH be.expert:FACT LNK
 5722 ‘Here (in Mbarkham), there is someone who specially treats teeth in the
 5723 west (of Mbarkham).’ (27-tApGi, 139-140)

5724 Locative adverbs, such as those based on the approximate locative *-c^hu* (§8.2.4.2)
 5725 can be combined with the locative pronouns in *-re* as shown by the phrase *nduuc^hu*
 5726 *ku're ri* ‘in the west side’ in (143).

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5727 Both series of locative pronouns can express static location as in examples
 5728 (142) to (144), or motion towards a place as in (145) and (146).

5729 (144) *nuitcu ku-ryzi-nuu nuu-ηu.*

DEM:LOC IPFV-stay-PL SENS-be

5730 ‘They live there.’ (20-RmbroN, 4)

5731 (145) *azō akuu kyntcʰab ri ky-ari-a tce, nuu kó̄smuuz*

1SG east street LOC AOR:EAST-go[II]-1SG LNK DEM only.after

5732 *kure nuu-nuu-ye-a*

DEM.PROX:LOC AOR:WEST-VERT-come[II]-1SG

5733 ‘I went there on the street, I just came back here.’ (conversation,
 5734 2013-12-02)

5735 (146) *βyytu nuu yuu u-χcyl ri spos.* [...]

upper.grindstone DEM GEN 3SG.POSS-middle LOC have.a.hole:FACT [...]

5736 *nuumutcu tce ky-yndzur uu-spa nuura pjúr-wy-lst.*

DEM:LOC LNK OBJ:PCP-grind 3SG.POSS-material DEM:PL IPFV-INV-throw

5737 ‘There is a hole in the middle of the upper grindstone, into which one
 5738 pours (the grains) that are to be ground.’ (160705 khABGa, 14)

5739 Apart from its locative uses, *nuitcu* can express a temporal meaning ‘at that
 5740 time’ as in (147) and (148).

5741 (147) <*qidian*> *tce ty-mjym ta-za a-puu-ηu tce, tce nuumuu*

seven.o'clock LNK AOR-hurt AOR:3→3'-start IRR-IPFV-be LNK LNK DEM

5742 *tua-sji nuu tu-mjym, tua-rzab nuu tu-mjym tce,*

one-day DEM IPFV-hurt one-night DEM IPFV-hurt LNK

5743 *u-fso <*qidian*> myctsa nuu müj-zí tce*

3SG.POSS-tomorrow seven.o'clock until DEM NEG:SENS-subside LNK

5744 *nuitcu tce kui-xtciu-xtci tua-zí juu-ze juu-ηu*

DEM:LOC LNK SBJ:PCP-EMPH~be.small INF-subside IPFV-start[III] SENS-be

5745 *tce*

LNK

5746 ‘(For instance), if (the headache) starts at seven o'clock, it hurts for one
 5747 day and one night, and subsides only in the next day at seven, at that
 5748 time it starts to subside a little.’ (24-pGArtsAG, 93-96)

- 5749 (148) *nutcu turme nura pxjk^hu pjy-me* *nui-ŋu tce.*
DEM:LOC people DEM:PL yet IFR.IPFV-not.exist SENS-be LNK
5750 ‘At that time (the time of the dinosaurs), humans did not exist yet.’
5751 (180421 bawanglong, 33)

5752 In addition, it can convey in some contexts a more abstract meaning like ‘in
5753 those circumstances’, as in (149).

- 5754 (149) *tceri nutcu kurn tcizo kynndzifzaŋsa nu*
but DEM:LOC also 1DU COLL:friend DEM
5755 *mui-pur-nui-qia-tci*
NEG-AOR-AUTO-tear.down-1DU
5756 ‘But even in those circumstances (working in different places, and
5757 meeting only once a year), we did not lose our friendship.’ (12-BzaNsa,
5758 42)

5759 As for *kutču*, it is almost exclusively used for spatial location; a metaphorical
5760 usage is attested in (150), where it means ‘in this story’.

- 5761 (150) *icq^ha nykinu <piqiu> nuu u-rmi* *ky-spa-t-a.*
FILLER FILLER ball DEM 3SG.POSS-name AOR-be.able-PST:TR-1SG
5762 *nřki, ts^huβdun ra kui rgoŋlu tu-ti-nuu* *nui-ŋu. izora, tce*
FILLER TOPO PL ERG ball IPFV-say-PL SENS-be 1PL LNK
5763 *kutcu* *tce nuu tu-ti-a* *ŋu.*
DEM.PROX:LOC LNK DEM IPFV-say-1PL be:FACT
5764 ‘I have learned how to say “ball”, people from Tshobdun call it *rgoŋlu*, we
5765 (do not have this word but) this is how I am going to say it here (in this
5766 story). (140514 huishuohua de niao, 4)

5767 The forms *nutču* and *nunutču* following a noun phrase result from the fusion
5768 of the postnominal demonstrative determiners *nui* and *nunu* with the locative
5769 postposition *tču* (§8.2.4.1), and are not to be analyzed as locative pronouns.

5770 7 Numerals and counted nouns

5771 7.1 Plain numerals

5772 This section describes the morphology of cardinal and ordinal numerals in Ja-
5773 phug. Unlike some other languages of the Sino-Tibetan family, which have vi-
5774 gesimal features or subtractive numerals (Mazaudon 2002), Japhug has a strict
5775 decimal system.

5776 In addition to plain numerals, Japhug has a system of numeral prefixes (§7.3.1)
5777 which occur on a specific type of nouns, *counted nouns*, discussed in §7.3.

5778 7.1.1 Numerals 1-10

5779 The basic numerals from one to ten are indicated in Table 7.1. The corresponding
5780 numeral prefixes are discussed in §7.3.1.1.

5781 Some dialects of Japhug other than the Kamnyu variety use *tʂy* ‘one’ instead.
5782 In calculations (see §7.6), the generic counted noun *tuu-rdoʂ* ‘one piece’ (§7.3.2)
5783 with the numeral prefix ‘one’ (§7.3.1) is used instead of *ci* ‘one’ to express the
5784 number ‘one’.

5785 Apart from *ci* ‘one’ and *sqi* ‘ten’, these numerals have clear cognates in lan-
5786 guages outside of the Gyalrongic group, even in Tibetan and Chinese; Table 7.1
5787 includes the Tibetan equivalent of these numerals (the numerals that are *not*
5788 cognate with their Japhug equivalents are indicated between brackets) and the
5789 Japhug pronunciation of these Tibetan words in borrowed words (see §7.1.6.1, in
5790 particular Table 7.4).

5791 The numerals from 2 to 9 have a prefix, uvular *χ-/ʂ-* in ‘two’ and ‘three’ and
5792 velar *kʊ-* from ‘four’ to ‘nine’. These prefixes do not appear in some derived forms
5793 such as the numbers 11-19 (Table 7.1.3 below) or approximate numerals (§7.2).

5794 The numeral *ʂnuz* ‘two’ is etymologically related to the dual modifier *ni* (§9.1.1.1),
5795 though the latter lacks the uvular prefix and the sibilant suffix (the vowel differ-
5796 ence is expected, as after adding the suffix /*-s/, the proto-Gyalrong rhyme *-is
5797 regularly yields Japhug -uz). The adverb *ʂnaʂna* ‘both’ (§9.1.1.1) is also probably
5798 related, though its morphological relationship with *ʂnuz* ‘two’ does not fit any
5799 known pattern.

5800 The superficial resemblance between *bmuz* ‘two’ and *kuçmuz* ‘seven’ could suggest
 5801 the existence of a former quinary system. However, the fact that these two
 5802 numerals have different vowels in Situ (Cogtse *kəniēs* ‘two’ and *kəçnās* ‘seven’,
 5803 from Huang & Sun 2002) makes this assumption less likely; it is in any case irrelevant
 5804 to the synchronic grammar of Japhug.

5805 Unlike the other numerals in Table 7.1, the free numeral *χsum* ‘three’ is identical
 5806 to the form found in compound loans such as *kumtçʰoχsum* ‘triratna’ from
 5807 དཀོན་མྚེས་གླྙྡུ་ dkon.mtcʰog.gsum ‘triratna’. Therefore, one cannot exclude the possibility
 5808 that it is a borrowing from Tibetan ཁྲྷ གྸྻ གྸྻ གྸྻ གྸྻ གྸྻ གྸྻ གྸྻ གྸྻ
 5809 ‘three’ (which was cognate to the Tibetan form, and phonetically similar to it). In this hypothesis, the alternative forms *-fsum* and *fsu-* for ‘three’ found
 5810 in the numerals 11-19 (§7.1.3) and tens (§7.1.2) could be remnants of the native
 5811 numeral. Alternatively, it is possible that the native word and the borrowing are
 5812 true cognates, and happen to have the same form by coincidence.

5813 The numeral *kungut* ‘nine’ has a coda *-t* which is not found in the cognates
 5814 of this numeral in Situ and languages outside of Gyalrongic, suggesting analogical
 5815 spreading of the coda from *kurcat* ‘eight’. This innovation is shared by all
 5816 Northern Gyalrong languages: Tshobdun has *kón"gát* (Sun & Blogros 2019) and
 5817 Zbu *kən"gát* (Gong 2018: 130). The same analogy independently occurred in the
 5818 Siyuewu dialect of Khroskyabs, where ‘nine’ is *ŋád* (Lai 2017: 174).

Table 7.1: Basic numerals in Japhug and Tibetan

	Native Japhug	Tibetan	Tibetan loanwords in Japhug
1	<i>ci</i> or <i>try</i>	ཇ ག ས ང གྷ ཉ ཁ ཁ ཁ ཁ ཁ ཁ ཁ ཁ	<i>χtəuy</i>
2	<i>bmuz</i>	ཇ ག ས ང གྷ ཉ ཁ ཁ ཁ ཁ ཁ	<i>βniz</i>
3	<i>χsum</i>	ཇ ག ས ང གྷ ཉ ཁ ཁ ཁ ཁ ཁ	<i>χsum</i>
4	<i>kuβde</i>	ཇ ག བ ཁ ཁ	<i>βzi</i>
5	<i>kumju</i>	ཇ ག ས ང གྷ ཉ ཁ ཁ ཁ ཁ	<i>rja</i>
6	<i>kuṭṣṛy</i>	ཇ ག ས ང གྷ ཉ ཁ ཁ	<i>tṣwṛy</i>
7	<i>kuçmuz</i>	(ཇ ག ས ང གྷ ཉ ཁ ཁ ཁ ཁ ཁ)	<i>βdun</i>
8	<i>kurcat</i>	ཇ ག ས ང གྷ ཉ ཁ ཁ	<i>βṛyt</i>
9	<i>kungut</i>	ཇ ག ས ང གྷ ཉ ཁ ཁ	<i>rgu</i>
10	<i>sqi</i>	(ཇ ག ས ང གྷ ཉ ཁ ཁ ཁ)	<i>ft̪eu</i>

5820 Numerals from 1 to 99 are a subclass of unpossessible nouns (§5.2), and cannot
 5821 take possessive prefixes; they differ in this regard from the higher numerals
 5822 (§7.1.4, §7.2).

5823 **7.1.2 Tens**

5824 The numerals for tens (Table 7.2) are relatively straightforward. With the ex-
 5825 ception of *yn̥sqi* ‘twenty’ and *fsusqi* ‘thirty’, they are predictable by combining
 5826 *sqi* ‘ten’ with the corresponding numeral prefix (§7.3.1). The numeral *kuungusqi*
 5827 ‘ninety’ is ambiguous, as the same form can also mean ‘nine or ten’ (see Table 7.5).

5828 The element *yn̥-* in *yn̥sqi* ‘twenty’ is related to the numeral *ɛnuz* ‘two’, but has
 5829 a velar *y-* prefix instead of the uvular *h-*, and has a different vowel. The adverb
 5830 *ɛnaɛna* ‘both’ is also relatable, but the alternations are not explainable from a
 5831 synchronic point of view.

Table 7.2: Tens

10	<i>sqi</i>
20	<i>yn̥-sqi</i>
30	<i>fsu-<i>sqi</i></i>
40	<i>kuβdʒ-<i>sqi</i></i>
50	<i>kumjy-<i>sqi</i></i>
60	<i>kutʃy-<i>sqi</i></i>
70	<i>kuçny-<i>sqi</i></i>
80	<i>kurcy-<i>sqi</i></i>
90	<i>kungu-<i>sqi</i></i>

5832 Other numerals under one hundred are built by combining the tens in Table 7.2
 5833 (removing the *-sqi* element) with the units in Table 7.3. For instance, 37 can be
 5834 obtained by putting together *fsusqi* ‘thirty’ and *sqaçnuz* ‘seventeen’ as *fsu-sqa-*
 5835 *çnuz*.

5836 **7.1.3 Numerals 11-19 and units**

5837 The numerals 11-19, listed in Table 7.3, serve as the basis for indicating units in
 5838 all following numerals between 21 and 99, by replacing the *-sqi* element of the
 5839 tens (Table 7.2) by the appropriate form. As an example of how to build numerals
 5840 above 19 with a unit 1-9, Table 7.3 illustrates the formation of the numerals 21 to
 5841 29 from *yn̥sqi* ‘twenty’.

5842 The numerals 11-19 present three morphological changes in comparison with
 5843 the basic numerals 1-9.

5844 First, the form *sqi* ‘ten’ alternates with *sqa-*. The origin of this Ablaut is un-
 5845 known, though it could be a type of *status constructus* (§5.4); some Gyalrongic
 5846 languages, such as Khroskyabs have a similar alternation (Lai 2017: 175–176).

Table 7.3: Numerals 11-19 and 21-29

10	<i>sqi</i>	20	<i>ynr̥sqi</i>
11	<i>sqa-p-tuy</i>	21	<i>ynr̥-sqa-p-tuy</i>
12	<i>sqa-m-nuz</i>	22	<i>ynr̥-sqa-m-nuz</i>
13	<i>sqa-f-sum</i>	23	<i>ynr̥-sqa-f-sum</i>
14	<i>sqa-βde</i>	24	<i>ynr̥-sqa-βde</i>
15	<i>sqa-mju</i>	25	<i>ynr̥-sqa-mju</i>
16	<i>sqa-p-r̥y</i>	26	<i>ynr̥-sqa-p-r̥y</i>
17	<i>sqa-çnuz</i>	27	<i>ynr̥-sqa-çnuz</i>
18	<i>sqa-rcat</i>	28	<i>ynr̥-sqa-rcat</i>
19	<i>sqa-ngut</i>	29	<i>ynr̥-sqa-ngut</i>

Second, the velar *kua-* and uvular χ -/ β - prefixes found in the base numerals are lost in all numerals 11-19.

Third, a labial element /p/ (*sqaptuy* ‘eleven’, *sqapry* ‘sixteen’), /m/ (*sqamnuz* ‘twelve’), or /w/ (*sqafsum* ‘thirteen’) is inserted between the *sqa-* and the following numeral root. It does not occur in seventeen, eighteen and nineteen (which already have a cluster), fourteen and fifteen (which have a cluster with a labial as first element).

The form *sqaptuy* ‘eleven’ contains an ablauted form of *try* ‘one’ as second element. The cluster *-pt-* in this word is the only case in the language of a /p/ followed by an obstruent (§4.2.3.1).

In *sqamnuz* ‘twelve’, the labial linker is nasalized by the following *n*. This is not a synchronic rule: for instance, a noun *çnaβndzyi* ‘snotty-nosed kid’ has β allomorph of /w/ before a prenasalized obstruent (§5.5.5.1). However, there are other cases of nasalization of labial consonants to /m/ before nasal or prenasalized consonants in Japhug (see §17.3.1).

In *sqapry* ‘sixteen’, not only the prefix *kua-* is lost, the *tʂ* affricate of the base form *kutʂry* ‘six’ is replaced by /r/, preceded by the linking element *-p-*. This /tʂ/ ~ /r/ alternation is evidence for a sound change **tr-* → /tʂ/ (§4.2.2.4). The numeral *kutʂry* ‘six’ contains two etymological prefixes, *kua-* and a prefix **t-* that has fused with the root as *-tʂry*. This **t-* prefix is possibly related to the *d-* of its Tibetan cognate དྲྔ སྔ ‘six’.

The numeral prefixes corresponding to the numerals between 11 and 99 are discussed in §7.3.1.2.

5870 **7.1.4 Hundred and above**

5871 There are two ways of expressing numbers above 99 in Japhug. First, the noun-
 5872 like numeral *yurza* ‘one hundred’ can occur on its own or be followed by another
 5873 numeral to express a number between 101 and 199, as in (1).

- 5874 (1) *azo kui-fse kui-yc^huic^ha zo uzuunu yurza kurcat*
 1SG SBJ:PCP-be.like SBJ:PCP-be.capable EMPH young.man hundred eight
 5875 *ra*
 need:FACT
 5876 ‘I need one hundred and eight able young men like me.’ (Norbzang, 16)

5877 The numeral *yurza* ‘one hundred’ cannot be combined with single digit numerals to express numbers between 200 and 900. The counted noun¹ *tu-ri* ‘one hundred’ is used for this purpose, as in 2. The two suppletive roots for hundreds are shared with Pumi (the numeral *çí* ‘hundred’ vs. the counted noun *-çej*, see Dauday 5878 2014: 101; evidence for cognacy with *yurza* and *tu-ri* is presented in Jacques 5879 2017c).

- 5880 (2) *χsui-ri jamar ndyre tu-nuu ko, tu-tup^hu nuu*
 three-hundred about LNK exist:FACT-PL SFP one-hive DEM
 5881 ‘There are about three hundred of them, in one hive.’ (26-GZo, 53)

5882 Numerals above the hundreds are all borrowed from Tibetan: *stoŋtsu* ‘thousand’, *kʰruutsu* ‘ten thousands’, *mbumχtyr* ‘hundred thousands’ originate from 藏文
 5883 *stoŋ.tsʰo* ‘thousand’, 藏文 *kʰri.tsʰo* ‘ten thousands’ and 藏文 *"bum.tʰer* ‘hundred
 5884 thousands’, respectively. Like other numerals, they are postnominal, as shown
 5885 by (3).

- 5886 (3) *NGOčna yuu nuu, uu-puu stoŋtsu tu tu-ti-nuu*
 spider GEN DEM 3SG.POSS-young thousand exist:FACT IPFV-say-PL
 5887 *nuu-ηu. qajuu yuu nuu, kʰruutsu tu tu-ti-nuu nuu-ηu.*
 SENS-be fish GEN DEM ten.thousands exist:FACT IPFV-say-PL SENS-be
 5888 ‘People say that spiders have a thousand offspring, and fishes ten
 5889 thousands.’ (26-mYaRmtsaR, 122-123)

5890 The numerals thousand and above can take other numerals as multiplicative
 5891 modifiers, as in (4), where *kutṣyy* ‘six’ follows *stoŋtsu* ‘thousand’ to express ‘six
 5892 thousand’. This use illustrates the difference between the numerals *stoŋtsu* ‘thou-
 5893 sand’ and above with *yurza* ‘hundred’, as when the latter is followed by a numeral,

¹Counted nouns are nouns that take an obligatory numeral prefix (§7.3).

5897 as *yurza kurcat* ‘one hundred and eight’, it can only be in additive, not multiplicative,
 5898 relation to it (see example 1 above). The multiplicative numeral modifier
 5899 to *stoŋtsu* ‘thousand’ cannot be preposed (Tshendzin says of a combination like
 5900 †*kutṣyy stoŋtsu* that *mu my-sytsø* ‘it does not make sense’).

- 5901 (4) *rŋul tui-xpa tce stoŋtsu kutṣyy jarma pui-fsor pui-cʰa*
 money one-year LNK thousand six about IPFV-earn SENS-can
 5902 ‘He can earn about six thousand (renminbi) per year.’ (14-siblings, 178)

5903 To have an additive interpretation, the comitative *cʰo* ‘with’ (or *cʰondyrre* ‘with’)
 5904 is used as in (5) and (6).

- 5905 (5) *stoŋtsu ci cʰo kutṣyy-ri*
 thousand one COMIT six-hundred
 5906 ‘One thousand six hundred (1600).’ (elicited)
- 5907 (6) *stoŋtsu ci cʰondyrre kutṣyy*
 thousand one COMIT six-hundred
 5908 ‘One thousand and six (1006).’ (elicited)

5909 In (7), a multiplicative modifier *sqi* ‘ten’ following *kʰruutsu* ‘ten thousands’ is
 5910 used instead of *mbumχt̪r* ‘hundred thousands’. The latter numeral, although
 5911 known to native speakers, is hardly ever used in speech.

- 5912 (7) *wi-ky-nukon nunia, rjylkʰyβ kʰruutsu sqi pjy-tu.*
 3SG.POSS-OBJ:PCP-rule DEM country ten.thousands ten IFR.IPFV-exist
 5913 ‘There were a hundred thousand countries under his rule.’ (140518 jinyin
 5914 chengbao-zh, 13)

5915 Unlike numerals under 100, *yurza* ‘one hundred’ and above are alienably pos-
 5916 sessed nouns and can take a third person possessive prefix *wi-* to express an ap-
 5917 proximate number (§7.2).

5918 7.1.5 Ordinals

5919 There are no native ordinal numbers in Japhug, even for ‘first’, which is ex-
 5920 pressed by combining the superlative *stu* ‘most’ (§26.4.1) with the subject par-
 5921 ticiple (§16.1.1) of the verb *myku* ‘be first’ (§20.6). This minimal participial rela-
 5922 tive *stu kuu-myku* (§23.5.1) can be used as prenominal modifier as in (8), but most
 5923 commonly occurs adverbially as in (9).

- 5924 (8) *stu kui-myku tui-xpa nuu nuu-rumantob ma, nuu ma*
 most SBJ:PCP-be.first one-year DEM IPFV-have.flower LNK DEM apart.from
 5925 *uu-mat me*
 3SG.POSS-fruit not.exist:FACT

5926 ‘The first year, it has flowers, but no fruits.’ (08-qaCti, 35)

- 5927 (9) *stu kui-myku nuu a-pi kui pú-wy-sat-a,*
 most SBJ:PCP-be.first DEM 1SG.POSS-elder.sibling ERG AOR-INV-kill-1SG
 5928 *nuu uu-q^hu tce, pyxtcui ty-sci-a,*
 DEM 3SG.POSS-after LNK bird AOR-be.born-1SG
 5929 ‘First, my elder sister killed me, and then I was reborn as a bird.’
 5930 (2005-stod-kunbzang, 396)

5931 With counted nouns (§7.3), it is strictly prenominal, and the counted noun can
 5932 be converted to an inalienably possessed noun (§7.3.4.1); for instance, the noun
 5933 phrase (10) can be used instead of *stu kui-myku tui-xpa* in (8). The phrase *stu kui-*
 5934 *myku* does not occur postnominally.

- 5935 (10) *stu kui-myku uu-xpa*
 most SBJ:PCP-be.first 3SG.POSS-year
 5936 ‘The first year’ (elicitation based on 8)

5937 There is no specific word meaning ‘last’ in Japhug either, and the participial
 5938 relative *stu kui-maq^hu* with the subject participle (§16.1.1) of *maq^hu* ‘be after’ is used
 5939 instead; as in the case of *stu kui-myku*, counted noun to inalienably possessed
 5940 noun conversion is possible, and for instance both (11) and (12) exist.

- 5941 (11) *stu kui-maq^hu tui-sŋi*
 most SBJ:PCP-be.after one-day
 5942 (12) *stu kui-maq^hu uu-sŋi*
 most SBJ:PCP-be.after 3SG.POSS-day
 5943 ‘The last day’ (elicited)

5944 Given the absence of native ordinals, Chinese ordinals are used (§7.1.6.2). Ti-
 5945 betan ordinals are only attested for names of months (§7.1.6.1) and even this use
 5946 is disappearing, as they are being replaced by their Chinese equivalents.

5947 Unlike many languages of the Sino-Tibetan family, the system of birth-order
 5948 ordinals is very rudimentary. The eldest son is simply called *stu kui-wxti* ‘the one
 5949 who is the biggest’ as in (13).

- 5950 (13) *wu-rjiti stu kui-wxti nuu ruuntc^bum tsoma rmi*
 3SG.POSS-child most SBJ:PCP-be.big DEM ANTHR ANTHR be.called:FACT
 5951 ‘Her eldest child is called Rinchen Sgrolma.’ (12-BzaNsa, 62)

5952 The only dedicated birth-order ordinal is *tulyst* ‘the second sibling’ (see §5.1.2.4
 5953 and §5.2.3). The inalienably possessed noun *wu-pa* ‘the one under’ can be used
 5954 to designate any following sibling, and the youngest sibling is designated by
 5955 the superlative form of the participle of *xtci* ‘be small’ (see example 14, which
 5956 illustrates all these terms).

- 5957 (14) *stu kui-wxti c^bondyre nuu wu-pa nuu tulyst ni*
 5958 most SBJ:PCP-be.big COMIT DEM 3SG.POSS-under DEM second.sibling DU
wuma zo pjy-cqra^b-ndzi. tce nuu ndzi-tcuu stu
 5959 really EMPH IFR.IPFV-be.intelligent-DU LNK DEM 3DU.POSS-son most
kui-xtci nunu, duuxpa ma wuma zo pjy-khe.
 5960 SBJ:PCP-be.small DEM poor.of LNK really EMPH IFR.IPFV-be.stupid
 5961 ‘The eldest son and the one under him, the second one, were very
 5962 intelligent. Their smallest son, poor of him, was very stupid’ (140430 jin
 e-zh, 5-6)

5963 7.1.6 Tibetan and Chinese numerals

5964 In addition to the native numerals presented above, Tibetan and Chinese num-
 5965 rals commonly occur in Japhug stories and conversations.

5966 7.1.6.1 Tibetan numerals

5967 In Japhug, Tibetan numerals (see Table 7.1 above) are mainly used in fixed ex-
 5968 pressions.² Some of these expressions exclusively comprise Tibetan words, for
 5969 instance *luskyr xtciwgniz* ‘twelve year cycle’ from ལྷ་སྲକ ‘lo.skar’ ‘year of the cycle’
 5970 and ཚ୍ୱାନ୍ୱିଜ୍ୱା ‘btciu.gnis’ ‘twelve’. Other compounds combine Tibetan numerals with
 5971 Japhug roots, for instance the possessive compound *rnaftciuχa* ‘having ears with
 5972 ten holes’ from *tu-rna* ‘ear’ (or Tibetan རྩྰྩ ‘rna’ ‘ear’, the form is ambiguous be-
 5973 tween cognate and borrowing), the numeral *ftciu-* (from ཚ୍ୱା ‘btciu’ ‘ten’) and the
 5974 verb *aχa* ‘lacking a piece’, which appears as postnominal modifier in the name
 5975 of a trickster character *qala rnaftciuχa* ‘the rabbit with ten holes in his ears’.

²Only a minority of Japhug speakers are fluent in Amdo or other Tibetic languages, so that Tibetan loanwords in Japhug, and in particular numerals, cannot be considered to be code-switching.

5976 The Japhug form *-χtəuy-* of the Tibetan numeral གཅིག ‘one’ occurs in com-
 5977 pounds, but is not attested as an independent word; however, it is possible that
 5978 it used to exist in Japhug at an earlier stage of the language (though perhaps not
 5979 as a numeral), as the stative verb *naxtəuy* ‘be the same’ is a denominal derivation
 5980 based on this numeral (§9.1.7, §20.7.1).

5981 The Tibetan ordinal numbers up to ten (and the cardinal numbers for ‘eleven’
 5982 and ‘twelve’), indicated in Table 7.4, can be used for months names. This usage is
 5983 not attested in conversations, but does occur in texts when speakers consciously
 5984 try to avoid using Chinese words. In example (15), Tshendzin first used the Chi-
 5985 nese 三月份 <sānyuèfèn> ‘third month’ and then corrected it to its Tibetan equi-
 5986 valent.

- 5987 (15) <*sanyuefen*> *jamar zlawa χsumba jamar tce ci cʰui-rypu*,
 5988 third.month about month third about LNK one IPFV-have.young
 ‘It bears young once in the third month.’ (21-lWLU, 64)

Table 7.4: Tibetan ordinals used in Japhug

Japhug	Tibetan
1 <i>tarbu</i>	དྱଶྲྷ ཀྱାଙ୍ପྼ དାର୍ଜྡ྘ ‘first’
2 <i>gnispa</i>	གླྙྤྚླྷ ཁ୍ରିଙ୍ଗྼ ཁ୍ରିଙ୍ଗྼ ‘second’
3 <i>χsumba</i>	ସୁମ୍ବା ཁ୍ରୁମ୍ବା ‘third’
4 <i>βziupa</i>	ୱିଶ୍ଵା ཁ୍ରେଶ୍ଵା ‘fourth’
5 <i>rjapa</i>	ୱିରା ཁ୍ରେରା ‘fifth’
6 <i>tšuuxpa</i>	ୱୁଶ୍ଵା ཁ୍ରେଶ୍ଵା ‘sixth’
7 <i>βdunpa</i>	ୱୁଦୁନ୍ ཁ୍ରେଦୁନ୍ ‘seventh’
8 <i>βṛyt̪pa</i>	ୱୁର୍ଯ୍ୟା ཁ୍ରେର୍ଯ୍ୟା ‘eighth’
9 <i>rgupa</i>	ୱୁଗୁପା ཁ୍ରେଗୁପା ‘ninth’
10 <i>ftčuupa</i>	ୱୁକୁପା ཁ୍ରେକୁପା ‘tenth’
11 <i>ftčuχtəuy</i>	ୱୁକୁ ཁ୍ରେକୁ.ଗ୍ଚିଗ ཁ୍ରେକୁ.ଗ୍ଚିଗ ‘eleventh’
12 <i>ftčuwp̪t̪iz</i>	ୱୁକୁ ཁ୍ରେକୁ.ଗ୍ନିସ ཁ୍ରେକୁ.ଗ୍ନିସ ‘twelfth’

5989 The ordinals can be used with the Tibetan word *zlawa* ‘month’ (from རླା.ବା
 5990 ‘moon, month’) as in (15), or without it as in (16) from the same text.

- 5991 (16) *rgupa jamar tce ci cʰui-rypu pui-ŋu.*
 5992 ninth about LNK one IPFV-have.young SENS-be
 ‘It bears young once in the ninth month.’ (21-lWLU, 66)

5993 In traditional stories of Tibetan origin, complete noun phrases in Tibetan inclu-
 5994 ding numerals can be found. For instance, in (17), the numeral *χsumrjatṣuyftcu*
 5995 from ཁྲໂମྰ୍ଜାତ୍ସୁୟିଫ୍ଟକୁ gsum.brg'a.drug.btcu ‘three hundred sixty’ occurs with the noun
 5996 *pja* (from Tibetan ད୍ୱା b'a ‘bird’; not normally used in Japhug except in compounds)
 5997 and the adverb *mundzamuχtcuy* ‘all kinds’ (from ཡିଏୟ ମିଆମିଗ୍ତେଗ୍ mi."dra.mi.gtēig ‘di-
 5998 verse, different’, §9.1.3.5).

- 5999 (17) *pja mundzamuχtcuy, χsumrjatṣuyftcu kua pyymbri*
 bird all.kinds 360 ERG bird.song
 6000 *pcyynpjcyyt zo to-lvt-nui,*
 IDPH.III:very.noisy EMPH IFR-throw-PL
 6001 ‘Three hundred sixty birds of all kinds sung bird songs.’ (2003smanmi,
 6002 139)

6003 7.1.6.2 Chinese numerals

6004 Chinese numerals are ubiquitous in Japhug, and many younger people (born after
 6005 1990) have trouble counting above twenty, even if they otherwise speak Japhug
 6006 fairly fluently. Even the most fluent speakers use Chinese numerals (with their
 6007 appropriate Chinese classifiers) when speaking normally.

6008 In examples (18) and (19), from a text describing the hamlets in the township of
 6009 Gdong-brgyad, the Chinese expressions 全乡 <quánxiāng> ‘the whole township’,
 6010 三千多人 <sānqiānduōrén> ‘three thousand people and a little more’ and 两个
 6011 小队 <liǎnggèxiǎoduì> ‘two groups’ (with the generic classifier 个 <gè> ‘cl’) are
 6012 used instead of Japhug native numerals and quantifiers to count the number of
 6013 people in the area. Note the use of the Cultural Revolution term 小队 <xiǎoduì>
 6014 ‘team, group’ as a counting unit. The use of Chinese here is due to the fact that
 6015 administration-related counting, even in villages, is done in Chinese.

- 6016 (18) *nunuu b'durjyt <quanxiang> nunuu <sānqiānduoren>*
 DEM ANTHR the.whole.township DEM three.thousand.people
 6017 *ma maje.*
 apart.from not.exist:SENS
 6018 ‘There are only a little more than three thousand people in the township
 6019 of Gdong-brgyad.’ (140522 RdWrJAt, 116)
- 6020 (19) *kymjuu nuu <lianggexiaodui> ma maje*
 Kamnyu DEM two.groups apart.from not.exist:SENS
 6021 ‘In Kamnyu there are only two xiaodui.’ (140522 RdWrJAt, 119)

6022 Given the absence of ordinal numerals in Japhug (§7.1.5), Chinese expressions
 6023 with the ordinal marker 第 /dì/ are used instead. In example (20), the Chinese
 6024 phrase 第一名 <dìyīmíng> ‘the first (in a competition)’ occurs, directly followed
 6025 by the participial clause *stu kuu-myku* ‘the first one’.

- 6026 (20) *tce βzui nuu kuu <diyiming> tce stu kuu-myku pŷr-mja.*
 LNK mouse DEM ERG first LNK most SBJ:PCP-be.first IFR-take
 6027 ‘The mouse obtained the first place.’ (150826 shier shengxiao-zh, 97)

6028 7.1.7 Use of the numerals

6029 Japhug numerals can occur on their own when counting (*ci*, *vnuz*, *χsui*, *kuβde...*)
 6030 or be used as postnominal attributive modifiers (§9.3). The noun can be elided
 6031 when the context is clear, especially when the same referent occurs in the previous
 6032 proposition as in (21) with *uu-rjít* ‘her children’ and (22) with 菜 <cài> ‘dish’.
 6033 In this case the numeral constitutes the head of the noun phrase.

- 6034 (21) *uu-rjít kunguat ty-tu ri, kuutṣyy nuu-si*
 3SG.POSS-child nine AOR-exist LNK six AOR-die
 6035 ‘She had nine children, but six of them died.’ (14-tApi taRi, 17)
- 6036 (22) <*cái*> *χsum tu-sui-lxt-i tce tce kuβde nuu kuu χsum*
 dish three IPFV-CAUS-throw-1PL LNK LNK four DEM ERG three
 6037 *tu-ndza-j kuu-fse.*
 IPFV-eat-1PL SBJ:PCP-be.like
 6038 ‘We used to order three dishes, and the four of us would eat (the) three (of
 6039 them).’ (140501 tshering skyid, 92-3)

6040 Numerals can also be modifiers of dual and plural pronouns as in (23). Since
 6041 pronouns are never obligatory in Japhug (§22.1.2), it is also possible to use a bare
 6042 numeral in core argument function with first or second person indexation on the
 6043 verb, as in (22), where the verb *tu-ndza-j* ‘we eat’ of the second proposition has
 6044 the 1PL -*j* suffix indexing the transitive subject, coreferent with the ergatively-
 6045 marked phrase *kuβde nuu kuu* ‘the four’ (standing for *ižo kuβde nuu kuu* ‘the four of
 6046 us’).

- 6047 (23) *tce ižo kuβde nuu tuturca ku-ryži-j tce,*
 LNK 1PL four DEM together IPFV-stay-1PL LNK
 6048 ‘The four of us were living together.’ (140501 tshering skyid, 85)

6049 Numerals can be used in collocations with two light verbs: the intransitive
 6050 verb *pa* ‘pass X years’ (§22.4.1.4) and the transitive verb *ndo* ‘take’ (§22.4.2.4).

6051 The numeral *ci* ‘one’ occurs in many additional functions: as an identity pro-
 6052 noun ‘the other one’ (§6.8), as a partitive pronoun ‘one of them’ (§6.7.2), as an in-
 6053 definite article ‘a, one’ (postnominal, §9.1.4), as an identity modifier ‘the other X’
 6054 (prenominal, §9.1.7) and as an adverb meaning ‘once, one time, a little’ (§22.2.1).

6055 7.2 Approximate numerals

6056 To express an approximate number, it is possible in Japhug to use the adverb
 6057 *jamar* ‘about’ (from Tibetan ལྚାରྚାରྚ བྷྱାରྚ ‘about, up and down’ and/or to combine
 6058 adjacent numerals in a row as in (24).

- 6059 (24) *tur-kʰyl nütçu բnuz, χsum kuβde jamar ku-ndzor.*
 one-place DEM:LOC two three four about IPFV-ANTICAUS:attach
 6060 ‘Two, three or four (of its flowers) grow in one place.’ (16-RIWmsWSi, 9)

6061 However, Japhug also has five morphological devices to build approximate
 6062 numerals (Tables 7.5 and 7.6).

6063 First, for numerals under seven (Table 7.5), one can build approximate numerals by prefixing a *la-* or *ly-* element to one (or two) numeral root(s). Not all possibilites are attested (for instance there is no such approximate numeral *†lytsyy* derived from only *kutsyy* ‘six’). Prefixation of *la-* / *ly-* occurs with other morpho-
 6064 logical changes: (i) loss of the velar *kuu-* prefix (but not the uvular one in ‘two’
 6065 and ‘three’, §7.1.1) (ii) loss of the *m-* preinitial in *lyyu* ‘about five’, but not of the
 6066 **t-* prefix of *kutsyy* (§7.1.3) in *lyytsyy* ‘five or six’ (otherwise *†lyyyryy* would be
 6067 have been found). The *la-* / *ly-* prefix is probably historically related to the *-kr-*
 6068 element found in *dvandva* collectives (§5.7.8.3).

6069 Above ‘seven’, the *ly-* prefix seem to have some productivity, as in example (25)
 6070 from a story translated from Chinese, it is found in the form *ly-kʰruutsu-sqi*, which
 6071 translates 数十万 <shùshíwàn> ‘several hundred thousands’. The normal way to
 6072 express this meaning in contemporary Japhug would be direct borrowing from
 6073 Chinese (§7.1.6.2), and this *Augenblicksbildung* was introduced to avoid using a
 6074 Chinese word.

- 6075 (25) <*zhanghan*> *ky-ti nunu kuu Յmaβmi ly-kʰruutsu-sqi jamar*
 ANTHR OBJ:PCP-say DEM ERG soldier about-10000-ten about
 6076 *zō to-ndo.*
 EMPH IFR-take
 6077 ‘The (general) called Zhang Han took several hundred thousand soldiers.’

(hist160721 pofuchenzhou-zh, 18)

Second, some approximate numerals are built by compounding two numeral roots (in some cases with the *la-* / *ly-* prefix, Table 7.5). The first numeral undergoes *status constructus* vowel change (§5.4), with loss of the codas -z and -t (§5.4.2.2). In the case of *cnycat* ‘seven or eight’ (illustrated by example 26), the form *cnyx-* is irregular (*†cnuu-* would be expected instead). Note that in this list *kungusqi* ‘nine or ten’ is ambiguous: this form can also mean ‘ninety’ (see Table 7.2).

- (26) *wizo numuu cnycat ci ty-ky-supra jamar zo*
 3SG DEM seven.or.eight one AOR-OBJ:PCP-CAUS-do about EMPH
qarma wxti ri,
 crossoptilon be.big:FACT but
 ‘Although the crossoptilon is as big as about seven or eight of them
 (weasels) put together.’ (27-spjaNkW, 56)

Table 7.5: Approximate numerals in Japhug (one to ten)

Approximate Numeral	Base Numerals
<i>laⁿnuuz</i> ‘a few’	<i>ɛnuuz</i> ‘two’
<i>laⁿnu^ysuum</i> ‘two or three’	<i>ɛnuuz</i> ‘two’
	<i>χsum</i> ‘three’
<i>ly^bde^ylyju</i> ‘four or five’	<i>ku^bde</i> ‘four’
	<i>kumju</i> ‘five’
<i>lyju</i> ‘about five’	<i>kumju</i> ‘five’
<i>lyyrt^yy</i> ‘five or six’	<i>kumju</i> ‘five’
	<i>kuut^yy</i> ‘six’
<i>cnycat</i> ‘seven or eight’	<i>kuⁿnuuz</i> ‘seven’
	<i>kurcat</i> ‘eight’
<i>kungusqi</i> ‘nine or ten’	<i>kungut</i> ‘nine’
	<i>sqi</i> ‘ten’

Third, for tens (Table 7.6), approximate forms can be formed using the same rule as tens from 40 to 90 (§7.1.2), by combining the *status constructus* of the unit numeral with the root *sqi* ‘ten’, for instance *lyyrsqi* ‘about fifty’ from *lyju* ‘about five’ like *kumyrsqi* ‘fifty’ from *kumju* ‘five’. These approximate numerals are rare and not attested in the non-elicited corpus.

6098 Fourth, an alternative way of producing approximate tens is to add the nu-
 6099 meral prefix *tu-* (§7.3.1) to a ten, as for instance *tuynrsqi* ‘about twenty’ from
 6100 *ynrsqi* ‘twenty’ (see example 27).

- 6101 (27) *tuynrsqi jamar tutturca ju-yi-nuu ηgryl*
 about.twenty about together IPFV-come-PL be.usually.the.case:FACT
 6102 ‘They come in groups of about twenty individuals.’ (23-qapGAmtWmtW,
 6103 105)

Table 7.6: Approximate numerals in Japhug (tens)

Approximate Numeral	Base Form
<i>tuynrsqi</i> ‘about twenty’	<i>ynrsqi</i> ‘twenty’
<i>tufsusqi</i> ‘about thirty’	<i>fsusqi</i> ‘thirty’
<i>tukuβdrysqi</i> ‘about forty’	<i>kuuβdrysqi</i> ‘forty’
<i>tukumjysqi</i> ‘about fifty’	<i>kumjysqi</i> ‘fifty’
<i>tuukutjysqi</i> ‘about sixty’	<i>kutjysqi</i> ‘sixty’
<i>tuukucnysqi</i> ‘about seventy’	<i>kuucnysqi</i> ‘seventy’
<i>tuukurcrysqi</i> ‘about eighty’	<i>kurcrysqi</i> ‘eighty’
<i>tuukungusqi</i> ‘about ninety’	<i>kungusqi</i> ‘ninety’
<i>lγjysqi</i> ‘about fifty’	<i>lγju</i> ‘about five’
<i>lγjytjysqi</i> ‘fifty or sixty’	<i>lγjytjyy</i> ‘five or six’
<i>cnrcrsqi</i> ‘seventy or eighty’	<i>cnrcat</i> ‘seven or eight’

6104 Fifth, in the case of numerals above 99, approximate numerals are built by
 6105 prefixing a third singular possessive *u-* prefix, as *u-yurza* ‘several hundreds’ (28),
 6106 *u-storjtsu* ‘several thousands’ (29) and higher numerals.

- 6107 (28) *u-yurza, χsui-ri jamar ndyre tu-nuu ko,*
 3SG.POSS-hundred three-hundred about TOP.ADVERS exist:FACT-PL SFP
 6108 *tua-tuipʰu nuu*
 one-hive DEM
 6109 ‘In one hive, there are about several hundreds, about three hundred of
 6110 them.’ (26-GZo, 51-2)

- 6111 (29) *tuu-ŋga tuu-rdo& n̄u w̄-stoŋtsu w̄-p^hu*
 INDEF.POSS-clothes one-piece DEM 3SG.POSS-thousand 3SG.POSS-price
 6112 *k̄u-fse ŋu ma*
 SBJ:PCP-be.like be:FACT LNK
 6113 ‘One piece of clothes (made from it), its price is several thousand
 6114 renminbi.’ (05-qaZo, 81)

6115

7.3 Counted nouns

6116 The term *counted nouns* designates a subclass of nouns that differs from inalienably possessed (§5.1.2), alienably possessed and unpossessible nouns (§5.2) in that 6117 they require a numeral prefix, whose paradigm is described in (§7.3.1). No other 6118 part of speech is compatible with these prefixes.

6119 For instance, the counted noun *-xpa* ‘year’ occurs in (30) with the prefix *χsui-*
 6120 ‘three’. It is not possible to express the same meaning by combining the bare
 6121 stem of the noun *-(x)pa* with the corresponding numeral numeral *χsum* ‘three’
 6122 (something like †*xpa χsum* or †*pa χsum* would be ungrammatical).

- 6123 (30) *χsui-xpa*
 three-year
 6124 ‘Three years’

6125 In this grammar, counted nouns are cited using the form with the numeral prefix ‘one’ (*tuu-xpa* in the case of ‘year’).³

6126 Numeral prefixes are bound forms historically derived from free numerals
 6127 (§7.3.1.7). These bound forms strictly precede the nominal stem, unlike free nu-
 6128 merals, which generally follow the nouns they modify (§7.1.7).⁴

6129 Only a highly restricted number of nominal stems can take numeral prefixes.
 6130 For instance, the alienably possessed *mbro* ‘horse’ or the inalienably possessed
 6131 *tr-pi* ‘elder sibling’ are not compatible with numeral prefixes. To express the
 6132 meanings ‘three horses’ or ‘three brothers’, one cannot add the numeral prefix
 6133 *χsui-*: forms such as †*χsui-mbro*, †*χsui-tr-pi* or †*χsui-pi* would be unintelligible.
 6134 Instead, one must use the free numeral *χsum* ‘three’ (§7.1.7) as in (31)

³One reviewer pointed out that this choice may be infelicitous, but in my opinion it is preferable in order to avoid confusion with other subclasses of nouns, in particular in the case of conversion from inalienable and alienable nouns to counted nouns (§7.3.4).

⁴However, the numeral+noun order is attested in some compounds (§5.5.1.1, §5.5.1.2).

6137 (31) *mbro χsum*

horse three

6138 ‘Three horses’

6139 A handful of alienably and inalienably possessed nouns can be *converted to*
6140 counted nouns and thus take numeral prefixes, but always with a semantic nar-
6141 rowing (§7.3.4.1, §7.3.4.2).

6142 The class of ‘counted nouns’ in this grammar is similar to what have elsewhere
6143 in the literature been described as ‘classifiers’ (in Chinese 量词 *liàngcí* ‘measure
6144 words’). The morphology-based term ‘counted noun’, independent of meaning
6145 and function, is preferred over ‘classifier’ because it is highly contestable that
6146 classification is indeed the main function of this class of words (see for instance
6147 François 1999, and §7.3.3).

6148 7.3.1 Numeral prefixes

6149 In this section, numeral prefixes are described following several categories (1-
6150 10, 11-99, approximate numerals and prefixes derived from nouns) and irregu-
6151 lar forms are discussed in a separated subsection (§7.3.1.5). A final subsection
6152 presents historical hypotheses to account for the numeral prefixal paradigm and
6153 its relationship to that of other Gyalrongic languages.

6154 7.3.1.1 Numeral prefixes between 1 and 10

6155 The paradigm of regular numeral prefixes from 1 to 10 in Kamnyu Japhug is in-
6156 dicated in Table 7.7. The prefixes are derived from the corresponding numeral
6157 by *status constructus* (§5.4), with loss of the coda and vowel alternation. Vowel
6158 alternation is optional for *kufde* ‘four’ and *kumju* ‘five’.

6159 Note that the forms of the numeral prefixes differ in some cases from the cor-
6160 responding numeral prefixes in tens (cf. Table 7.2), compare *kučnuu-sji* ‘seven
6161 days’ with *kučnγ-sqi* ‘seventy’.

6162 7.3.1.2 Numeral prefixes between 11 and 99

6163 Above ten, numeral prefixes present some variation. Table 7.8 shows the most
6164 common forms of the numeral prefixes between 11 and 20 (from which all num-
6165 rals between 11 and 99 can be generated following the rules described in §7.1.2),
6166 but many cases without vowel alternation or with preservation of the codas -z
6167 (32) or -γ (34) are attested, as in (32) for instance

Table 7.7: 1-10 regular numeral prefixes in Japhug

Numeral	Free form	<i>-sŋi</i> ‘day’
1	<i>tŋy</i>	<i>tuu-sŋi</i>
2	<i>ŋtuuz</i>	<i>ŋtuu-sŋi</i>
3	<i>χsuum</i>	<i>χsuu-sŋi</i>
4	<i>kuaβde</i>	<i>kuaβde-sŋi, kuaβdχ-sŋi</i>
5	<i>kumŋju</i>	<i>kumŋju-sŋi, kumŋχ-sŋi</i>
6	<i>kutʂyγ</i>	<i>kutʂχ-sŋi</i>
7	<i>kuačnuuz</i>	<i>kuačnuu-sŋi</i>
8	<i>kurcat</i>	<i>kurcχ-sŋi</i>
9	<i>kungut</i>	<i>kunguu-sŋi</i>
10	<i>sqi</i>	<i>squu-sŋi</i>

- 6168 (32) *ma u-me kunuγ ynysqamnuuz-pyrme t^hu-azyut.*
 LNK 3SG.POSS-daughter also twenty.two-year.old AOR-reach
 6169 ‘Even his daughter is now twenty-two.’ (14-siblings, 317)

Table 7.8: 11-20 numeral prefixes in Japhug

Numeral	Free form	<i>-sŋi</i> ‘day’
11	<i>sqaptuuγ</i>	<i>sqaptuu-sŋi</i>
12	<i>sqamnuuz</i>	<i>sqamnuu-sŋi</i>
13	<i>sqafsum</i>	<i>sqafsum-sŋi</i>
14	<i>sqaqβde</i>	<i>sqaqβde-sŋi</i>
15	<i>sqamŋju</i>	<i>sqamŋju-sŋi</i>
16	<i>sqapryγ</i>	<i>sqapryχ-sŋi</i>
17	<i>sqačnuuz</i>	<i>sqačnuu-sŋi</i>
18	<i>sqarcat</i>	<i>sqarcχ-sŋi</i>
19	<i>sqangut</i>	<i>sqanguu-sŋi</i>
20	<i>ynysqiu</i>	<i>ynysquu-sŋi</i>

- 6170 In example (33), we observe the two alternative forms *-squu-* and *-sqi-* for the
 6171 tens in the same sentence. While for the numeral ten only the prefix *squu-* (or its
 6172 variant *sqr-*, see Table 7.10 below) is found, for tens between 20 and 90 vowel

6173 alternation is optional and there is free variation between the two forms. In the
 6174 corpus, we find 15 examples of *-sqi-* and 14 of *-squ-*, suggesting that both are about
 6175 equally common.

- 6176 (33) *tua-p^huu nuu tce rcanuu, li, fsusqi-ldzi jamar,*
 one-tree DEM LNK UNEXP:DEG again thirty-long.object about
 6177 *kuqbdysqui-ldzi jamar tu.*
 forty-long.object about exist:FACT
 6178 ‘On one tree, there are about thirty or forty (branches).’ (14-sWNgWJu,
 6179 200)

6180 Example (34) illustrates three alternative forms with the counted noun *tx-rzab*
 6181 ‘one night’: *ynysqaptuu-rzab* with regular loss of coda, *ynysqaptuy-rzab* with preser-
 6182 vation of the coda, and *ynysqamnuuz tx-rzab* as two words, the numeral being a
 6183 kind of prenominal modifier. The first form is regular, while the other ones each
 6184 are *hapax legomena*.

- 6185 (34) *tce nuu ynysqaptuy-rzab tu-tsu juu-ra. “tce*
 LNK DEM twenty.one-night IPFV-pass SENS-be.needed LNK
 6186 *ynysqaptuu-rzab tu-tsu tce juu-kaa^h yu” juu-ti-nuu ri,*
 twenty.one-night IPFV-pass LNK IPFV-hatch be:FACT SENS-say-PL LNK
 6187 *azuy^h nuu ynysqamnuuz tx-rzab myctsa mui-nuu-kaa^h.*
 1SG:GEN DEM twenty.two one-night until NEG-AOR-hatch
 6188 ‘(Eggs) need twenty-two days to hatch; people say ‘They hatch in
 6189 twenty-two days’ but mine only hatch after twenty two days.’ (150819
 6190 kumpGa, 34-36)

6191 7.3.1.3 Approximate numeral prefixes

6192 Approximate numerals also have corresponding prefixal forms. Table 7.9 presents
 6193 the forms attested in the corpus.

6194 By far the most commonly used approximate numeral prefix is *la^hnmu-X*, whose
 6195 meaning is not ‘one or two’ as could have been expected from the use of the *l^hr-*/
 6196 *la-* prefix in the other examples, but ‘a few’ (see example 35 – life expectancy of
 6197 goats and sheep is much above two years).

- 6198 (35) *ts^hyt qazo nuanuu tce la^hnmu-xpa ma c^huu-mduu*
 goat sheep DEM LNK a.few-year apart.from IPFV-live.up.to

Table 7.9: Approximate numeral prefixes in Japhug

Approximate Numeral	Approximate Numeral Prefix
<i>laεnuz</i> ‘a few’	<i>laεnui-</i>
<i>lγβdeλγu</i> ‘four or five’	<i>lγβdeλγu-</i>
<i>lγju</i> ‘about five’	<i>lγju-</i>
<i>lγγtʂy</i> ‘five or six’	<i>lγγtʂ-, lγγtʂy-</i>
<i>cnycat</i> ‘seven or eight’	<i>cnyc-</i>

- 6199 *múij-ŋgryl* *ma tce cʰui-rgyz cti*
 NEG:SENS-be.usually.the.case LNK LNK IPFV-be.old be.AFF:FACT
 6200 ‘Goats and sheep only live for a few years, and then become old.’
 6201 (05-qaZo, 144)

6202 Just like approximate numbers can also be expressed by juxtaposition of numerals (§7.2), it is possible to juxtapose counted nouns (the same counted noun with
 6203 contiguous numeral prefixes, as in 36), or to combine a numeral with a counted
 6204 noun whose numeral prefix is contiguous to it, as in (37).
 6205

- 6206 (36) *tce numuχsuu-zum kuβde-zum jamar ku-xtcʰuit tu.*
 LNK DEM three-bucket four-bucket about SBJ:PCP-contain exist:FACT
 6207 ‘There are (jars) that can contain about three or four buckets (of water).’
 6208 (26-tChWra, 4)

- 6209 (37) <*tuolaji> tui-yyn ju-yuit nu rcanu, ynysqi fsuisqi-fkur*
 tractor one-time IPFV-bring DEM UNEXP:DEG twenty thirty-burden
 6210 *jamar ju-su-γzyuit cʰa.*
 about IPFV-CAUS-reach can:FACT
 6211 ‘Each time the tractor brings (firewood), it can move about twenty or
 6212 thirty loads (the size a person can carry on his back).’ (140430 tWfkur,
 6213 23-24)

6214 Additionally, the paucal meaning can be expressed by converting the counted
 6215 noun into an inalienably possessed noun with a third person possessive prefix
 6216 and reduplication of the noun stem (see §7.3.4.1).

6217 7.3.1.4 Other numeral prefixes

6218 In addition to the numerals mentioned above, all higher and compound numerals,
 6219 an interrogative pronoun and a participle form can appear as prefixes of counted
 6220 nouns.

6221 The numerals above 99 (§7.1.4) occur as numeral prefixes without vowel alter-
 6222 nation, as *yurza-xpa* ‘a hundred years’ and *stoytsu-xpa* ‘a thousand years’ (from
 6223 *yurza* ‘hundred’ and *stoytsu* ‘thousand’).⁵

6224 The prefical form of hundreds based on the counted noun *tu-ri* ‘one hundred’
 6225 have double numeral prefixes, such as *χsui-ri-xpa* ‘three hundred years’ in (38).

- 6226 (38) *tcendyre χsui-ri-xpa* *tx-tsū tce, li kuijju*
 LNK three-hundred-year AOR-pass LNK again oath
 6227 *pur-ta-t-a* *tce,*
 AOR-put-TR:PST-1SG LNK
 6228 ‘Three hundred years passed, and I made another oath.’ (140512 yufu yu
 6229 mogui-zh, 92)

6230 In the case of complex numerals, such as the very common *yurza kurcat* ‘one
 6231 hundred and eight’, only the last one undergoes *status constructus*, as in (39)
 6232 and (40), where we find *yurza* as a separate phonological word followed by the
 6233 counted noun with the numeral prefix *kurcȳ-* (from *kurcat* ‘eight’).

- 6234 (39) *comm bri yurza kurcȳ-jom,* [...] *comts^hor*
 iron.chain hundred eight-length.of.two.outstretched.arms ... iron.nails
 6235 *yurza kurcȳ-ldža ra*
 hundred eight-long.object be.needed:FACT
 6236 ‘(I) need a chain of one hundred and eight fathoms, and one hundred and
 6237 eight nails.’ (2003tWxtsa, 21)
- 6238 (40) *yurza kurcȳ-ydȳt qapri nuu a-tx-ce* *ra*
 hundred eight-section snake DEM IRR-PFV:UP-go be.needed:FACT
 6239 ‘May the snake be cut into hundred and eight sections!’ (2012 Norbzang,
 6240 280)

⁵Even in the absence of vowel alternation, the prefical status of these numerals is shown by three pieces of evidence: (i) the fact that they combine with non-free elements like the stem *-xpa* ‘year’, which require a numeral prefix, (ii) the absence of stress and (iii) the inability to pause or insert any element in between, except in the case of speech errors.

6241 The interrogative pronoun *t^hystuy* ‘how many’ has the prefixal form *t^hystuu-*
 6242 with counted nouns (§ 6.5.3).

6243 The subject participle *kui-^hyntc^huu* of the stative verb *antc^huu* ‘be many’, has the
 6244 prefixal form *k^hyntc^huu-*, as in (41). This prefix is very common in the corpus.

- 6245 (41) *tce numuu k^hyntchuu-tupuu yuu nuu-tursa uu-sta juu-ηu*
 LNK dem many-household DEM 3PL.POSS-grave 3SG.POSS-place SENS-be
 6246 *ma*
 LNK

6247 ‘It is the grave-place of many families.’ (140522 kAmYW tWji, 96)

6248 It is however not possible to convert any noun, pronoun or quantifier into a
 6249 numeral prefix; with other words, it is necessary to convert the counted noun
 6250 to an inalienably possessed noun, with a third singular *uu-* prefix instead of the
 6251 numeral prefixes, see §7.3.4.1.

6252 The nouns *tu-sla* ‘one month’ and *tu-xpa* ‘one year’ can be used with a numeral
 6253 prefix *k^hrry-* not attested with other counted nouns (see §7.5.1).

6254 7.3.1.5 Irregular forms

6255 A handful of counted nouns, in particular *tr-rzab* ‘one night’, have an alternative
 6256 paradigm with /γ/ instead of *uu* in the prefixes, as shown by the forms *bnγ-rzab*
 6257 ‘two nights’ and *χsy-rzab* ‘three nights’ in (42).

- 6258 (42) *bnγ-rzab jamar, χsy-rzab jamar to-tsu tce tcendyre cha*
 two-night about three-night about IFR-pass LNK LNK alcohol
 6259 *uu-di tu-mnym juu-ηu.*
 3SG.POSS-smell IPFV-have.a.smell SENS-be
 6260 ‘After two or three nights, one can smell the smell of alcohol.’ (160703
 6261 araR, 40)

6262 The complete paradigm of this noun is presented in Table 7.10.

6263 There is however some degree of variation, and using the regular paradigm
 6264 is not considered erroneous. In the corpus, the numeral ‘one’ form *tu-rzab* ‘one
 6265 night’ is more common than *tr-rzab*, possibly because of the homophony with
 6266 the inalienably possessed noun *tr-rzab* ‘time’ found in examples such as (44). For
 6267 other numerals, the forms in Table (7.10) are considerably more common than
 6268 the regular ones. In addition, the γ vocalism is also found with other numeral
 6269 prefixes such as the interrogative (*t^hystr-rzab* ‘how many nights’).

Table 7.10: Irregular numeral prefixes in Japhug

Numeral	Free form	<i>-rzaš ‘night’</i>
1	<i>tʂy</i>	<i>tʂy-rzaš</i>
2	<i>tsuš</i>	<i>tsuš-rzaš</i>
3	<i>χsum</i>	<i>χsum-rzaš</i>
4	<i>kwβde</i>	<i>kwβdʂ-rzaš</i>
5	<i>kumju</i>	<i>kumjy-rzaš</i>
6	<i>kutʂy</i>	<i>kutʂy-rzaš</i>
7	<i>kwačnuž</i>	<i>kwačnɔy-rzaš</i>
8	<i>kurcat</i>	<i>kurcɔy-rzaš</i>
9	<i>kungut</i>	<i>kungɔy-rzaš</i>
10	<i>sqi</i>	<i>sqɔy-rzaš</i>

- 6270 (43) *tce qarma nuu, tuu-rzaš tce kwβde kumju jamar pjui-sat-nuu,*
 LNK crossoptilon DEM one-night LNK four five about IPFV-kill-PL,
 6271 *tuu-rdoš, tuurme tuu-rdoš kuu*
 one-piece person one-piece ERG
 6272 ‘Crossoptilons, in one night, each of (the hunters) can kill four or five of
 6273 them.’ (23-qapGAmtWmtW, 163)
- 6274 (44) *tʂy-rzaš tʂy-rŋfi tce, nuu-ji ra*
 INDEF.POSS-time AOR-be.long LNK 3PL.POSS-field PL
 6275 *kui-duu~dyn kuur-jur~jom lo-pyaš-nuu, con̩tca*
 SBJ:PCP-EMPH~be.many SBJ:PCP-EMPH~be.broad IFR-turn.over-PL timber
 6276 *kui-duu~dyn pʃy-pʰuit-nuu*
 SBJ:PCP-EMPH~be.many IFR-remove-PL
 6277 ‘After some time/as time went on, (those people) had ploughed many
 6278 broad fields for them, and chopped a lot of timber.’ (2002qajdoskAt, 90)
- 6279 Apart from *tʂy-rzaš ‘one night’*, counted nouns following the paradigm in Table
 6280 (7.10) are very rare. The counted nouns *tuu-tya ‘one span’* and *tuu-rtsy ‘one story’*
 6281 have the irregular forms *χsu-tya ‘three spans’* and *χsu-rtsy ‘three stories’* (com-
 6282 peting with regular *χsu-tya* and *χsu-rtsy*) as in (45), but not for other numeral
 6283 prefixes.

- 6284 (45) *nuu χsy-tya kuβde-tya jamar tu-ŋŋji c^ha.*
DEM three-span four-span about IPFV-be.long can:FACT
6285 ‘It can grow three or four spans long.’ (14-sWNgWJu, 194)

6286 Another unrelated irregularity concerns the counted noun *tu-yjyn* ‘one time’: 6287 free variation between *-jyn* and *-yjyn* is observed for the numerals ‘two’ and 6288 ‘three’ (both *χsui-yjyn* ‘three times’ and *χsui-jyn* are attested).

6289 A similar case is observed with counted noun *tu-xpa* ‘one year’; the form *-xpa* 6290 is obligatory for one to three (*ɛnui-xpa* ‘two years’, *χsui-xpa* ‘three years’), but 6291 for ‘four’ on, both stems *-xpa* and *-pa* are attested (both *squu-xpa* ‘ten years’ and 6292 *squu-pa* ‘ten years’ are possible, though the former is more common), including 6293 for approximate numerals (*cnycr-pa* ‘seven or eight years’).

6294 The counted noun *tu-zlob* ‘one time’ (see §7.6 on its use) is attested in (46) with 6295 the special form *ɛnui-zlob* ‘two times’ whose first element is a numeral prefix form 6296 *ɛnui-* influenced by the Tibetan numeral ལྷི་ *gnis* ‘two’ (in Japhug pronunciation 6297 *ɛniz-*). The regular form *ɛnui-zlob* ‘two times’ also exists.

- 6298 (46) *a-zda yuu kur-fse ɛnui-zlob nuu tu-ndze-a*
1SG.POSS-companion GEN SBj:PCP-be.like two-times DEM IPFV-eat[III]-1SG
6299 *nuu-tʂan*
SENS-be.fair
6300 ‘It would be fair if I had two times as much to eat as the other one.’
6301 (140426 lv he luozi-zh, 9)

6302 The stem *-zlob* looks like a blend from the two Tibetan words རྒྱା *zlog* ‘turn 6303 around’ and རྒྱା *zlo* ‘repeat’. Tibetan numerals are generally post-nominal, but 6304 prenominal numerals also exist as in ཉ୍ରୀୟ ନିସିଲଦାବ ‘two times’.

6305 7.3.1.6 Distributed numeral prefixes

6306 The distributed form of counted nouns is built by reduplicating the numeral ‘one’
6307 prefix *tu-*, as *tu-tu-rdo* from the generic counted noun *tu-rdo* ‘one piece’ (see
6308 §7.3.3) in example (47).

- 6309 (47) *zuruuzyri q^he, tce tuu-tuu-rdo* *nuu nuu-zyy-qyr-nuu q^he*
progressively LNK LNK one-one-piece DEM IPFV-get.separated-PL LNK
6310 ‘Progressively, some of them get separated (from the herd).’ (20-RmbroN,
6311 59)

6312 Example (48) with *tui-tui-xpa* ‘some years’ from *tui-xpa* ‘one year’ clearly illus-
 6313 trates the functional difference with approximate numerals (§7.2 and §7.3.1.3), as
 6314 the meaning of the distributed counted noun cannot be translated here as ‘a few
 6315 years’ – the years when the income is good are not necessarily contiguous in
 6316 time.

- 6317 (48) *tui-tui-xpa tce a-pui-pe tce, k^hrutsu ui-ro*
 one-one-year LNK IRR-IPFV-be.good LNK ten.thousand 3SG.POSS-excess
 6318 *jamar pui-fsor pui-c^ha*
 about IPFV-earn SENS-can
 6319 ‘Some years if (his income) is good, he can earn more than ten thousands.’
 6320 (14-siblings, 180)

6321 An alternative distributed form involves partial reduplication of the stem of
 6322 the counted noun and replacing the numeral prefix by a third singular posses-
 6323 sive *ui-*, as in the conversion from counted noun to inalienably possessed noun
 6324 (§7.3.4.1). In (§49), the counted noun *tui-p^hui* ‘one tree’ is changed to *ui-p^hui~p^hui*
 6325 ‘some trees’. The other distributed form *tui-tui-p^hui* could also be used in the same
 6326 context without meaning difference.

- 6327 (49) *zgoku kui-mbro tce, ckryz kui-wxti ra nur*
 mountain NMZL:S/A-be.tall LNK oak NMZL:S/A-be.big PL DEM
 6328 *ui-re^hyβ ri ui-p^hui~p^hui zo tu tce*
 3SG.POSS-between LOC 3SG.POSS-PART~tree EMPH exist:FACT LNK
 6329 ‘On high mountains, among big oaks, there are some (of these little trees).’
 6330 (16-CWrNgo, 177)

6331 This distributed form puts emphasis on the non-contiguousness and spread
 6332 over distribution of the entities designated by the reduplicated counted noun: in
 6333 (§49) for instance, its presence implies that the little trees are not clustered, but
 6334 rather scattered among the oaks.

6335 Distributed counted nouns can also be repeated to put even more emphasis on
 6336 the scattered distribution (see §7.3.2.3).

6337 7.3.1.7 Historical perspectives on the numeral prefixal paradigm

6338 Most non-Tibetan languages of Western Sichuan/Northern Yunnan have counted
 6339 nouns (generally called ‘classifiers’, see §7.3.3) with numeral-counted noun order
 6340 (see for instance Zhang 2014, Michaud 2017: 163–194). It is striking that among
 6341 the quasi-isolating languages (Lolo-Burmese, Naish), numeral prefix paradigms

are commonly a pocket of irregular morphology (Bradley 2005, Michaud 2011); this is also true in some Hmong-Mien languages (see Gerner & Bisang 2010).

By contrast, while Japhug and the other Gyalrong languages have a richer morphology in general, the numeral prefixal paradigms are, with only few exceptions (§7.3.1.5), suspiciously regular. The historical interpretation of this observation is not completely straightforward (Jacques 2017c), but in any case counted nouns are morphologically like determinative compounds (§5.5.1.1) with a numeral as first element, undergoing *status constructus* in the case of more integrated numerals (some of the numerals under 100, see §7.3.1.1, §7.3.1.2 and §7.3.1.3) and immune from it in the case of higher numerals (§7.3.1.4).

One morphological alternation common to all numeral prefixes under 10 is the loss of the codas, otherwise a rare phenomenon in noun compounds (see §5.4.2.2). For numerals above 10, there is some degree of free variation in the preservation of the codas (see for instance example 34 p.250); the forms preserving codas are rarer, and may be ongoing analogical levelling.

Even in the case of lower numerals, there are indirect traces of the former existence of codas, in particular in irregularities (§7.3.1.5). A few counted nouns like *tuu-xpa* ‘one year’ and *tuu-yjyn* ‘one time’ have velar fricative preinitials *x-/y-* which are lacking in some forms of the paradigm.

In the case of *tuu-xpa* ‘one year’, note the alternative stem *-pa* (*squu-xpa* ‘ten years’ vs. *squu-pa* ‘ten years’), the time ordinals (§7.5.2), the adverb *pakuku* ‘every year’ and the verb *pa* ‘pass X years’ (see example 117, §22.4.1.4) from which the counted noun *tuu-xpa* ‘one year’ is historically derived. Cognates of this root *-pa* appear in other Burmo-Gyalrongic languages such as Naish (Jacques & Michaud 2011) but are restricted to time ordinals, and do not occur as counted nouns. Even in the closely related Stau language, time ordinals such as *javə* ‘last year’ and *pəvə* ‘this year’ have a root *-və* cognate to Japhug *-pa*, but the corresponding counted noun *e-fku* ‘one year’ has a different root which left no trace in the Gyalrong languages. The generalization of the *-pa* root to the counted paradigm is probably a common Gyalrong innovation (see §7.3.4.3).

A possible explanation for this *x-/y-* element is that it originates from the coda of the numeral ‘one’ (although replaced by *ci* ‘one’, this former numeral is still found in the element *-tuy* in *sqaptuy* ‘eleven’) through false segmentation (**tuk-pa* → **tuu-kpa* → **tuu-xpa* ‘one year’) and subsequent generalization to the whole paradigm.⁶ It is not an example of *x-/y-* nominalization (§16.5.2).

⁶Note that since proto-Gyalrong **kp-* regularly yields *βγ-* with metathesis (Jacques 2004: 272), this false segmentation must have occurred after the **kp-* → *βγ-* sound change, which is not shared with other Gyalrong languages.

6377 7.3.2 Counted nouns in quantifying function

6378 This section discusses the use of counted nouns in quantifying function, as noun
 6379 modifiers, head of a noun phrase or a sentential quantifier.

6380 The main functions of counted nouns include partitive, distributive, restrictive
 6381 and iterative meanings.

6382 7.3.2.1 Partitive

6383 When occurring as postnominal modifiers, most counted nouns are essentially
 6384 *partitive* in meaning, referring to a certain number of individuals from a group,
 6385 and are not used to express indefiniteness (§7.3.2.7): the determiner *ci* ‘one’ (§9.1.4.1)
 6386 occurs instead in this meaning.

6387 Thus, a phrase such as *turme tuu-rdoꝝ* combining the noun *turme* ‘person’ with
 6388 the generic counted noun *tuu-rdoꝝ* ‘one piece’ (see § 7.3.3 on counted noun se-
 6389 lection) is generally either to be translated as a partitive ‘one of them’ as in (50).

- 6390 (50) *turme uuuaz pjy-tu tce, turme tuu-rdoꝝ nuu rcanuu,*
 people two IFR.IPFV-exist LNK people one-piece DEM UNEXP:DEG

6391 *uu-styrju uffa zo tu-βze tce,*
 3SG.POSS-truth completely EMPH IPFV-do[III] LNK

6392 ‘There were two persons, one of them always told the truth (and the
 6393 other one was a liar).’ (140427 yuanhou-zh, 2-3)

6394 The partitive meaning is found even when the individual counted noun occurs
 6395 on its own without overt head noun as in (51).

- 6396 (51) *uu-tcuu kuβde puu-tu ri, uuζo kui-fse*
 3SG.POSS-son four PST.IPFV-exist but 3SG SBJ:PCP-be.like
 6397 *kui-cqraꝝ tuu-rdoꝝ ciŋꝝ puu-me nuu-ŋu*
 SBJ:PCP-be.intelligent one-piece even PST.IPFV-not.exist SENS-be
 6398 ‘He had four sons, but not even one of them was smart like him.’
 6399 (2005tAwakWcqraR, 3)

6400 The partitive meaning is found in particular when counted nouns modify mass
 6401 nouns, such as *parsca* ‘pork’ in (52).

- 6402 (52) *pakuku zo pabca tu-rdoø, qhe tce tce stoø*
 every.year EMPH pork one-piece LNK LNK LNK broad.bean
 6403 *chu-yut,*
 IPFV:DOWNSTREAM-bring
 6404 ‘Every year, he would bring a piece of pork and broad beans.’ (140501
 6405 tshering scid, 35)

6406 7.3.2.2 Distributive

6407 Counted nouns can also have a distributive meaning ‘each of them’ when another
 6408 numeral or counted noun occurs in the same clause, indicating that each of the
 6409 members of the group performs the same action, the verb can either receive plu-
 6410 ral (as in 53 and 43) or singular indexation (example 54). This is a particular case
 6411 of fluid number indexation (§14.6.1).

- 6412 (53) *tce tce turme tu-rdoø kuu khuna bnuaz χsum jamar tu-ndo-nuø*
 LNK LNK person one-piece ERG dog two three about IPFV-take-PL
 6413 ‘Each of them (of the hunters) takes two or three dogs.’ (150829
 6414 KAGWcAno)
- 6415 (54) *turme tu-rdoø kuu chymdyru tu-ldza tu-nuø-ndym*
 people one-piece ERG drinking.straw one-CL IPFV-AUTO-take[III]
 6416 ‘Each person takes one straw.’ (30-tChorzi, 40)

6417 Counted noun with a collective meaning (§7.3.3.2) such as *tu-tupuu* ‘one house-
 6418 hold’ also frequently have a partitive meaning, especially when combined with
 6419 a numeral.

- 6420 (55) *tce tur-tupuu tce, uu-qazo kuβdysqi, kumyxsqi jamar*
 LNK one-household LNK 3SG.POSS-sheep forty fifty about
 6421 *pur-tu.*
 PST.IPFV-exist
 6422 ‘Each household used to have about forty or fifty sheep.’ (160712 smAG,
 6423 24)

6424 Temporal counted nouns such as *tu-sji* ‘one day’ (§7.5.1) are generally repeated
 6425 when used in distributive function in the meaning ‘every (day)’ (§7.3.2.3). How-
 6426 ever, in combination with other counted nouns, they can mean ‘per ...’ as in (56),
 6427 even without repetition.

- 6428 (56) *tua-sŋi tce tua-kʰutsa jamar tua-rdor kuu pjur-tsʰi tua-cʰa*
 one-day LNK one-bowl about one-CL ERG IPFV-drink SENS-can
 6429 ‘One (cat) can drink about one bowl of milk per day.’ (21-IWLU, 48)

6430 When no other numeral or counted noun is present, the modifier of Tibetan
 6431 origin *rajri* ‘each’ (from རྗྱ རྩ ལྷ རྗྱ.ରେ ‘each’; see also §9.1.3.3) can be used to specify
 6432 the distributive meaning as in (57).

- 6433 (57) *tua-tupuu rajri yuu, tua-mbro pjy-tu...*
 one-household each GEN 3PL.POSS-horse IFR.IPFV-exist
 6434 ‘Each household used to have horses etc.’ (150820 kAnWCkat, 2)

6435 Counted nouns can have a combined distributive and partitive meaning ‘each
 6436 one of their...’, such as *tua-ntsi* ‘one of a pair’ in (58).

- 6437 (58) *tce tcʰeme ra kuu tua-ntsi ka-ta-nuu,*
 LNK girl PL ERG 3PL.POSS-knee one-of.a.pair AOR:3→3'-put-PL
 6438 *ty-tcuii ra kuu tua-ntsi bnuaz ka-ta-nuu ri,*
 INDEF.POSS-son PL ERG 3PL.POSS-knee two AOR:3→3'-put-PL LNK
 6439 ‘The girls (in their group each) put one of their knees, the boys put their
 6440 two knees (as a support for the tea kettle).’ (2005-stod-kunbzang, 179)

6441 7.3.2.3 Repetition of counted nouns

6442 Repeating a counted nouns with the same numeral prefix has either a distributive
 6443 or a distributed meaning.⁷

6444 Example (59) illustrates the distributive meaning (‘each’, ‘each single’, ‘one by
 6445 one’) of counted noun repetition with an individual counted noun (*tua-ldzi* ‘one
 6446 long object’) and also a partitive counted noun (*tua-spra* ‘one handful’). Repeated
 6447 counted nouns of measure can be used to refer to the unit in which a whole
 6448 mass of elements (here the hemp stalks) is divided into (‘into bundles’, ‘bundle
 6449 by bundle’).

- 6450 (59) *tysymu nuu tce tujcyia tú-wy-lyt tce, [...] tua-ldzi*
 hemp DEM LNK sickle IPFV-INV-throw LNK one-long.object
 6451 *tua-ldzi púa-wy-pʰut tce tce nunuu li tua-spra*
 one-long.object IPFV-INV-pluck LNK LNK DEM again one-handful

⁷If the numeral prefixes are different however, an approximate numeral interpretation results, see §7.3.1.3.

- 6452 *tui-spra tú-wy-xtcyr.*
 one-handful IPFV-INV-tie
 6453 ‘As for hemp, one uses a sickle and cuts (the stalks) one by one and then
 ties them into bundles.’ (14-tasa, 51-43)

6455 The distributive meaning also occurs with repeated temporal counted nouns,
 6456 as in (60).

- 6457 (60) *tce tui-xpa tui-xpa tu-łob q^he tce qartsui tce pjui-k^hru*
 LNK one-year one-year IPFV-come.out LNK LNK winter LNK IPFV-be.dry
 6458 *cti.*
 be.AFF:FACT
 6459 ‘It grows every year (it is an annual plant), and dies in winter.’ (140512
 6460 tAzraj, 10)

6461 Alternatively, rather than juxtaposing counted nouns, coordinating them with
 6462 the additive *ny* (§8.2.6) as in (62) also results in a distributive meaning.

- 6463 (61) *tce nurja ndyre ui-puu nuu tui-rdoż ny tui-rdoż*
 LNK cow TOP.ADVERS 3SG.POSS-offspring DEM one-piece ADD one-piece
 6464 *ma me tui-xpa tui-yjyn ma pjui-rxpu*
 apart.from not.exist:FACT one-year one-time apart.from IPFV-bear.young
 6465 *ny-c^ha*
 NEG-can:FACT
 6466 ‘As for cows, they (have) their young only one by one, and can only bear
 6467 young once a year.’
- 6468 (62) *nunu muurmumbju nuu tui-tc^ha ny tui-tc^ha ntsui tuturca ntsui*
 DEM swallow DEM one-pair ADD one-pair always together always
 6469 *ku-ryzi-nuu nyu tce*
 IPFV-stay-PL be:FACT LNK
 6470 ‘Swallows are always in pairs.’ (03-mWrmWmbjW, 56)

6471 Repeated counted nouns also express a distributed meaning as in (63). Like the
 6472 distributed numeral prefixes (§7.3.1.6), this construction indicates that the entities
 6473 referred to by the counted nouns are scattered more or less homogeneously.

- 6474 (63) *tui-rdoꝝ tui-rdoꝝ kui-fse tu-tob nyu ma*
 one-piece one-piece SBJ:PCP-be.like IPFV-come.out be:FACT LNK
 6475 *my-aryk^humk^hył.*
 NEG-be.heterogeneously.distributed:FACT
 6476 ‘It grows in scattered fashion, not in clusters here and there.’
 6477 (22-BlamajmAG, 132)

6478 It is also possible to repeat counted nouns with distributed numeral prefixes
 6479 to emphasize even more the scattered distribution as in (64).

- 6480 (64) *tceri tui-tui-rdoꝝ tui-tui-rdoꝝ nyu-nyu ma kui-nyndzurya*
 LNK one-one-piece one-one-piece SENS-be LNK SBJ:PCP-be.neighbours
 6481 *kui-fse kui-nyrykhumk^hył kui-fse*
 SBJ:PCP-be.like SBJ:PCP-be.heterogeneously.distributed SBJ:PCP-be.like
 6482 *maje.*
 not.exist:SENS
 6483 ‘They are scattered one by one, and are not together in clusters.’
 6484 (24-zwArqhAjmAG, 81)

6485 7.3.2.4 Restrictive

6486 The only context where the phrase *turme tui-rdoꝝ* consistently means ‘one person’
 6487 is in restrictive constructions (‘only one person’) with the exceptive postposition
 6488 *ma* ‘apart from’ (§8.2.8), as in (65). In negative restrictive constructions with *ciny*
 6489 ‘not even one’, individual counted nouns with the numeral *tui-* ‘one’ also occur
 6490 as in (66).

- 6491 (65) *t^ham turme tui-rdoꝝ ma me*
 now people one-piece apart.from not.exist:FACT
 6492 ‘Now there is only one person (in that place).’ (140522 tshupa, 35)
- 6493 (66) *qartsu tce u-jwas tui-mpcar ciny ui-ku*
 winter LNK 3SG.POSS-leaf one-leaf not.even 3SG.POSS-head
 6494 *kui-ndzoꝝ me.*
 SBJ:PCP-ANTICAUS:attach exist:FACT
 6495 ‘In winter, not even one leaf (remains) on it.’ (11-mYAm, 37)

6496 As illustrated by the following pair of examples (from a similar episode in
 6497 two traditional stories), in this construction both noun+individual counted noun
 6498 (67)⁸ or plain numeral (68) can occur.

⁸The 1DU suffix on the existential verb *maje-tci* is a case of partitive indexation (§14.6.1.3).

- 6499 (67) *turme bnuu-rdoꝝ ma manje-tci tce,*
 people two-piece apart.from not.exist:SENS-1DU LNK
 6500 *ky-ynuundz̥yquqyr mx-nuu-c^ha-tci,*
 INF-RECIP:eat.on.one's.own NEG-AUTO-can:FACT-1DU
 6501 ‘There are only two of us, we cannot eat on our own (without sharing
 6502 with each other).’ (2003kunbzang, 100)

- 6503 (68) *tcizo bnuuz ma manje-tci tce, zaka ky-nur-βzu*
 1DU two apart.from not.exist:SENS-1DU LNK each INF-AUTO-make
 6504 *mx-rtax^h-tci*
 NEG-be.enough:FACT-1DU
 6505 ‘There are only two of us, there are not enough of us to each act on our
 6506 own.’ (2002 qaCpa, 220)

6507 In examples (69) and (70), also with noun+individual counted noun, there is
 6508 no specific restrictive construction, but there is an implicit restrictive meaning
 6509 (‘because of (just) one person’, ‘only one staff’).

- 6510 (69) *turme tui-rdoꝝ u-ndža nuu zo to-stu-nuu cti*
 people one-piece 3SG.POSS-reason DEM EMPH IFR-do.like-PL be.AFF:FACT
 6511 *ri,*
 LNK
 6512 ‘They did all that because of one person.’ (2003smanmi-tamu, 101)

- 6513 (70) *nuuzora yuu nuu-cymuyduu c^ho kur-fse nuu u-ts^hyt nuu,*
 2PL GEN 2PL.POSS-gun COMIT SBJ:PCP-like DEM 3SG.POSS-instead DEM
 6514 *tcizo yuu tci-tṣpi tui-ldzi pui-tu tce, nuu*
 1DU GEN 1DU.POSS-staff one-long.object PST.IPFV-exit LNK DEM
 6515 *ky-nuu-t^hu-tci cti wo*
 AOR-AUTO-spread-1DU be.AFF:FACT FSP
 6516 ‘Instead of guns like you have, we (only) had one staff, and we laid it over
 6517 (the river to walk on it as a bridge).’ (2003 Kunbzang, 188)

6518 Individual counted nouns can also express a combination of partitive and re-
 6519 strictive meaning, ‘just X of them’, as in (71).

- 6520 (71) *tui-rdoꝝ ma-piu-wy-sat ra ma tce rcanuu,*
 one-piece NEG.IMP-PFV-INV-kill be.needed:FACT LNK LNK UNEXP:DEG
 6521 *kyrrxpa zo c^hu-car tce nuu u-zda nuu kuu*
 several.years EMPH IPFV-search LNK DEM 3SG.POSS-companion DEM ERG

- 6522 *nur-car* *ny* *nur-car* *tce*
 IPFV-search LNK IPFV-search LNK
 6523 ‘One should not just kill one of them, otherwise it will look for it for
 6524 years, its mate will search and search for it.’ (22-qomndroN, 37-39)

6525 Another type of restricted meaning is, in the case of mass nouns such as *rdystas*
 6526 ‘stone’, the meaning ‘in one piece’ as in example (72), with the individual counted
 6527 nouns *tu-ldzi* ‘one long object’ or *tu-rdoṣ* ‘one piece’ (the storyteller hesitates
 6528 between the two) occurring here not as noun modifier, but as nominal predicates
 6529 with the participle of the copula *yu* ‘be’ (§22.5.1.1). In this example, *tu-rdoṣ* is in
 6530 this analysis a noun phrase on its own.

- 6531 (72) *rdystas tuu-ldzi*, *tuu-rdoṣ* *kua-yu* *kua yjui*
 stone one-long.object one-piece SBJ:PCP-be ERG watchtower
 6532 *χsur-ldzi* *rjylsa uu-byri* *kutcu a-puu-tu*,
 three-long.object palace 3SG.POSS-front here IRR-IPFV-exist
 6533 ‘If from one monolith (a stone which is in one piece), three towers were
 6534 made here in front of the palace, (I would feel much better).’
 6535 (2003smanmi-tamu, 120)

6536 Unlike languages such as Chinese, where the meaning ‘alone’ can be expressed
 6537 by the numeral ‘one’ with a quantifier (一个人 <yīgèrén> ‘one person, alone’),
 6538 this meaning is not normally conveyed by counted nouns in Japhug, but rather
 6539 by the adverbial root *-sti* ‘alone’ (see §22.2.2.4).

6540 7.3.2.5 Sentential quantifying function

6541 Some counted nouns, rather than being used as postnominal quantifiers, can
 6542 have scope over the whole sentence. Two constructions can be distinguished:
 6543 the iterative/semelfactive construction, in which the counted nouns designate
 6544 the number of time that an action takes place, and the pseudo-object construc-
 6545 tion.

6546 Only a minority of counted nouns can be used in the iterative/semelfactive
 6547 construction. This group includes temporal counted nouns like *tuu-yjyrn* ‘one time’
 6548 (§7.5.1), counted nouns derived from verbs (§7.3.4.3) such as *tuu-txrtçʰuu* ‘hitting
 6549 with the hoe one time’ (from *tçʰuu* ‘hit, gore’) and *tuu-trfskyr* ‘one turn’ (from *fskyr*
 6550 ‘turn around’) or from ideophones (§7.3.4.4) such as *tuu-trxur* ‘one turn’.

6551 Semelfactive counted nouns can either be used as objects of an auxiliary verb,
 6552 mainly *lxt* ‘release’ (§22.4.2.2), as in (73) and (74), or as sentential quantifiers
 6553 (§7.3.2.5), as in (75) with the intransitive verb *mtçur* ‘turn’.

- 6554 (73) *qab kyntc^hur-txte^hur* *to-lyt*
 hoe several-hitting.with.the.hoe IFR-release
 6555 ‘He hit several times with the hoe.’ (elicited)
- 6556 (74) *ηnui-txxur to-lyt* *ηnui-ηu*
 two-turn IFR-throw SENS-be
 6557 ‘He ran two laps.’ (2003sras, 210)
- 6558 (75) *χc^ha pcov laεnui-txxur ku-mtcu^r, ve pcov laεnui-txxur ku-mtcu^r*
 right side a.few-turn IPFV-turn left side a.few-turn IPFV-turn
 6559 *ηu.*
 be:FACT
 6560 ‘It turns several times on the right, and several times one the left.’ (150826
 6561 qro kWnWkhABGa, 4-5)

6562 In the pseudo-object construction, counted nouns semantically related to the
 6563 *patient* of the main verb (even in intransitive constructions lacking an object)
 6564 occur to express the meaning ‘not even one ...’ (in a negative construction) or
 6565 ‘a few...’. This construction is most clearly illustrated with intransitive verbs. In
 6566 examples (76) and (77), the intransitive verbs with *rundzvts^{hi}* ‘have a meal’ and
 6567 *ruçmi* ‘speak, utter words’ cannot take overt object noun phrases (they are not
 6568 semi-transitive, see §14.2.4), but occur here with counted noun quantifiers refer-
 6569 ring to the non-overt patients (the food in 76 and the words in 77), which would
 6570 be the object of the corresponding transitive verbs *ndza* ‘eat’ and *ti* ‘say’.

- 6571 (76) *tr-pytso* *ra tuu-mu* *wi-xçyt* *kui*
 INDEF.POSS-child PL NMLZ:action-be.afraid 3SG.POSS-strength ERG
 6572 *tuu-tuu-kur* *ciny zo* *ky-rundzvts^{hi}* *mu-pjy-c^ha-nui.*
 one-INDEF.POSS-mouth even EMPH INF-eat NEG-IFR.IPfv-can-PL
 6573 ‘The children were so afraid that they could not even eat one mouthful.’
 6574 (160704 poucet4-v2, 52)
- 6575 (77) *laεnui-ηka ruçmi-tci*
 few-word speak:FACT-1DU
 6576 ‘Let us speak a few words.’ (elicited)

6577 In these examples, adding an overt noun would be ungrammatical, and the quan-
 6578 tifiers *tuu-tuu-kur* *ciny zo* ‘not even one mouthful’ and *laεnui-ηka* ‘a few words’
 6579 cannot be analyzed as objects. Rather, they are sentential adverbs, whose gram-
 6580 matical status is comparable to that of temporal counted nouns (§7.5.1).

6581 7.3.2.6 Other

6582 We also find examples of counted nouns without partitive, distributive, restricted
 6583 or iterative meaning.

6584 This is the case in particular for counted nouns with a collective meaning, denot-
 6585 ing a group of entities whose quantity can be precise (*tu-t^ha* ‘one pair’) or un-
 6586 specified (*tu-bo^z* ‘one group’, *tu-tupu* ‘one household’ or *tu-tup^hu* ‘one hive’). In
 6587 (78) for instance, *vnui-tupu* means ‘two households’, not ‘two of the households’
 6588 or ‘each of the households’. Note also the plural (rather than dual) indexation
 6589 on the verb *tu-nuu*, showing the inherent collective meaning of the counted noun
 6590 *tu-tupu* ‘one household’. Plural indexation here is optional (§14.6.1.1). In this ex-
 6591 ample, *vnui-tupu* is *not* a modifier of the placename *ta^zrdo*: this placename is an
 6592 absolute locative adjunct (§8.1.9).

- 6593 (78) *t^ham ta^zrdo vnui-tupu tu-nuu*
 now placename two-household exist-PL

6594 ‘Now there are two households in Tarrdo.’ (140522 tshupa, 19)

6595 This neutral number quantification meaning is also attested with non-collective
 6596 counted nouns. For instance, in (79), *χsu-l^hza* ‘three (long objects)’ occurs in the
 6597 same context as the numerals *ci* ‘one’ and *χsum* ‘three’. In (80) likewise, it is clear
 6598 from the context that neither a partitive, distributive, nor restrictive interpreta-
 6599 tion is possible.

- 6600 (79) *tcendyre t^h-t^hcu nu^z k^hu t^hpi ci na-car xc^hndzu*
 LNK INDEF.POSS-son dem ERG staff one AOR:3→3'-search twig
 6601 *χsu-l^hza, qapi χsum k^hyzji w-ηgwi*
 three-long.object white.stone three feedbag 3SG.POSS-inside
 6602 *pa-rku nu^z-ηu.*
 AOR:3→3'-put.in SENS-be

6603 ‘The boy looked for a staff, and put three twigs and three stones in the
 6604 (horse’s) feedbag.’ (2005-stod-kunbzang, 148)

- 6605 (80) *tce nu^zcu tce t^hsu w-rku z^hu si tu-p^hu p^hy-tu,*
 LNK DEM:LOC LNK path 3SG.POSS-side LOC tree one-tree IFR.IPFV-exist
 6606 ‘There, on the side of the road, there was a tree.’ (The divination 2002, 10)

6607 However, this function is not very widespread in native texts.

6608 In texts translated from Chinese or elicited material however, this usage is very
 6609 common, as speakers will easily calque the Chinese noun+classifier construction.

6610 In example (81) for instance *qajy tuu-ldzi* ‘one fish’ is very probably calqued from
 6611 Chinese 一条鱼 *yī-tiáo yú* (one-CL fish).⁹

- 6612 (81) *qajy tuu-ldzi cʰondyre qacʰya ci pjy-mto puu-ŋu*
 fish one-long.object COMIT fox one IFR-see SENS-be
 6613 ‘He saw a fish and a fox.’ (140505 xiaohaitu-zh, 41)

6614 Future studies on the use of counted noun as quantifiers should be therefore
 6615 exclusively based on texts not translated from Chinese and conversation, not on
 6616 translations and elicitation.

6617 7.3.2.7 Definiteness

6618 In Japhug, counted nouns are not specifically used to mark indefiniteness; they
 6619 can even occur with demonstratives such as *nii* ‘this’ in noun phrases with a
 6620 definite referent. In (82) and (83) for instance, the bowl of oil and the tree in
 6621 question were mentioned earlier in the story and are clearly definite.

- 6622 (82) *kʰa cʰy-zyuit tce tuu-kri tuu-kʰutsa nii*
 house IFR:DOWNSTREAM-reach LNK INDEF.POSS-oil one-bowl DEM
 6623 *ko-ckuit.*
 IFR-drink.completely
 6624 ‘He arrived at the house and drank the bowl of oil.’ (140501 mdzadi, 23)

- 6625 (83) *si tuu-pʰuu nii uu-pʰaab uu-ntsi nii*
 tree one-tree DEM 3SG.POSS-half 3SG.POSS-one.of.a.pair DEM
 6626 *pjy-rom zo, uu-pʰaab uu-ntsi nii*
 IFR.IPFV-be.dry EMPH 3SG.POSS-half 3SG.POSS-one.of.a.pair DEM
 6627 *pjy-k-yrŋi-ci zo,*
 IFR.IPFV-PEG-be.green-PEG EMPH
 6628 ‘One half of that tree was dry and the other half was green.’ (The
 6629 divination 2002, 11)

6630 7.3.3 Counted nouns and semantic classes

6631 This section presents the semantic restrictions on the use of particular counted
 6632 nouns. It also discusses the cases of nouns that are compatible with several counted
 6633 nouns.

⁹The original text from which (81) was translated is 不久，老三又看见了一条鱼和一只狐狸。The counted noun *tuu-ldzi* ‘one long object’ however is really applied to fishes, snakes and worms in Japhug even in non-translated texts (§7.3.3).

6634 7.3.3.1 Non-collective counted noun

6635 The counted noun *tu-rdoꝝ* ‘one piece’ can occur as postnominal modifier with
 6636 a considerable variety of nouns, designating people, animals, inanimate objects,
 6637 including mass nouns; it is the counted noun by default.

6638 A minority of nouns select other individual counted nouns referring to specific
 6639 shapes: *tu-ldza* ‘one long object’, *tu-mpcar* ‘one leaf’ and *tu-phu* ‘one tree’.

6640 The counted noun *tu-ldza* ‘one long object’, like Chinese 一条 <yítíáo> ‘one
 6641 long object’ or 一根 <yígēn> ‘one long object’, occurs in the corpus with nouns
 6642 belonging to the following semantic categories:

- 6643 • Stick-like objects: *wu-ru* ‘its stalk’, *tr-zrym* ‘root’, *trji* ‘staff’, *taqaꝝ* ‘needle’,
 6644 *tumpa* ‘arrow’, *dyrbu* ‘fern’ or *ndzu* ‘little stick, chopsticks’ (ex. 84)
- 6645 • Limbs, hair and other protruding body-parts: *tu-mi* ‘leg, foot’, *tu-kvrm*
 6646 ‘hair’, *tr-muj* ‘feather’, *ta-bru* ‘horn’.
- 6647 • Limbless animals: *qapri* ‘snake’, *qay* ‘fish’
- 6648 • Towers: *yuu* ‘watchtower’

6649 (84) *tci-xcynndzu χsui-ldza puu-tu tce*
 1DU.POSS-twig three-long.object PST.IPFV-exist LNK
 6650 ‘We had three twigs.’ (2003kubzang, 204)

6651 The counted noun *tu-mpcar* ‘one leaf’ occurs with flat objects, including tree
 6652 leaves (with *tr-jwaꝝ* ‘leaf’ as in 85), sheets of cloth (with *raz* ‘cloth’) and snowflakes
 6653 (with *trjpa* ‘snow’).

6654 (85) *wu-jwaꝝ nuu vnuu-mpcar ma me tce*
 3SG.POSS-leaf DEM two-leaf apart.from not.exist:FACT LNK
 6655 ‘It only has two leaves.’ (16-CWrNgo, 188)

6656 The counted noun *tu-mpcar* ‘one leaf’ can also refer to money (in present-day
 6657 China, bank notes are by far more common than coins even for small amounts
 6658 of money), meaning ‘one renminbi’.

6659 The counted noun *tu-phu* ‘one tree’ occurs with the generic noun *si* ‘tree’ or
 6660 names of particular species.

6661 7.3.3.2 Collective counted noun

6662 Most nouns referring to humans and animals can occur with the counted noun
 6663 *tui-boṣ* ‘one group’. However, the collective counted noun *tui-juy* ‘one pack’ ap-
 6664 pears to be exclusively used with horses. Its only attestations in the corpus (for
 6665 instance 86) are found in a translated text.

- 6666 (86) *li nuu jamar ki a-jr-tur-ce tce, tcendyre nuutcu tce,*
 again DEM about DEM:PROX IRR-PFV-2-go LNK LNK DEM:LOC LNK
 6667 *myzui mbro tui-juy tu tce,*
 more horse one-herd exist:FACT LNK
 6668 ‘Continue going again for about that distance, and there will be a pack of
 6669 horse.’ (150824 kelaosi-zh, 205)

6670 7.3.3.3 Multiple counted nouns

6671 Some nouns are compatible with more than one counted noun postnominal mo-
 6672 difier, with different connotations. For instance *zgo* ‘mountain’ can be used with
 6673 the generic counted noun *tui-rdoṣ* ‘one piece’ as in (87), but also with *tui-ldzi* ‘one
 6674 long object’ as in (88) in the meaning ‘mountain range’ and also with *tui-trymbaj*
 6675 ‘one side’ to mean ‘mountain face’.

- 6676 (87) *nuu-kʰa uu-rkuu zgo tui-rdoṣ puu-ri*
 DEM house 3SG.POSS-side mountain one-piece AOR-be.left
 6677 ‘When there was only one mountain left (on his way back) home’
 (Lobzang03, 65)

- 6679 (88) *rŋguakxta nuu li zgo bntui-ldzi tu tce,*
 TOPO DEM again mountain two-long.object exist:FACT LNK
 6680 ‘(As for the placename) Rngukata, there are also two mountain ranges.’
 6681 (140522 Kamnyu zgo, 64)

6682 In other cases, the change of counted noun does not entail a radical semantic
 6683 contrast. For instance, the noun *si* ‘tree’, while generally used with *tui-pʰu* ‘one
 6684 tree’, is also attested with the counted noun *tui-ldzi* ‘one long object’, as in (89),
 6685 without clear semantic difference.

- 6686 (89) *maka rdystab c^ho si rcanuu tu-lldza ciny*
 completely stone COMIT tree UNEXP:DEG one-long.object even.one
 6687 *zo kui-me sc^hiz ky-azyut-ndzi juu-ŋu,*
 EMPH SBJ:PCP-not.exist INDEF.LOC AOR:EAST-reach-DU SENS-be
 6688 ‘They arrived at a place where there was no stones and not even one tree.’
 6689 (2003 Kunbzang, 195)

6690 7.3.4 Counted nouns and other parts of speech

6691 This section presents the derivations from other parts of speech (including other
 6692 nominal classes, such as inalienably and alienably possessed nouns) into counted
 6693 noun, and from counted noun into other classes.

6694 7.3.4.1 Counted nouns and inalienably possessed nouns

6695 Counted nouns and inalienably possessed nouns stand out among other nouns
 6696 in having an obligatory prefix. Since the citation form of both classes of nouns –
 6697 the numeral ‘one’ prefix *tu-* and the indefinite possessor prefixes *tu-/t^h-* – are ho-
 6698 mophonous, it is not unexpected that conversion occurs between the two classes.

6699 Given the fact that numeral prefixes are a closed class (see §7.3.1 and in parti-
 6700 cular §7.3.1.4), when one needs to use a quantifier without numeral prefix equi-
 6701 valent, it is necessary to convert the counted noun into an inalienably possessed
 6702 noun in third person singular form, with the quantifier before it. In example
 6703 (90), the quantifier *nua t^hamtçyt* ‘that many’ cannot be converted to a prefix, and
 6704 therefore the counted noun *tu-tup^hu* ‘one type’ is converted to an inalienably
 6705 possessed noun in 3SG possessive form *u-tup^hu*.

- 6706 (90) *tce paŋ tur-ŋjyn pjúr-wy-ntc^ha nua nua t^hamtçyt u-tup^hu*
 LNK pig one-time IPFV-INV-butcher DEM DEM all 3SG.POSS-type
 6707 *juu-łor ra*
 IPFV-come.out be.needed:FACT
 6708 ‘Each time one kills a pig, one will get that many types (of foodstuff from
 6709 it).’ (05-paR, 93)

6710 Similarly, in (91), the more complex phrase *yurza u-ro* ‘more than one hundred’
 6711 with the emphatic *zo* occurs with the 3SG prefix.

- 6712 (91) *yurza u-ro zo u-tupuu tu-j*
 hundred 3SG.POSS-excess EMPH 3SG.POSS-household exist:FACT-1PL
 6713 ‘There are more than one hundred households of us.’ (22-kumpGatCW,
 6714 32)

6715 Example (92) illustrates a third case of conversion from counted noun to in-
 6716 alienably possessed noun: a third singular possessive on the converted counted
 6717 noun indicates here indefinite number, which makes it possible to specify the
 6718 quantity as the predicate (*pjy-k-γntc^hu-ci* ‘they used to be many’) instead of the
 6719 numeral prefix (*kγntc^hu-tupu* ‘many households’, see §7.3.1.4).

- 6720 (92) *kuucunγua nui, u-tupu* *pjy-k-γntc^hu-ci* *nγ,*
 former.time DEM 3SG.POSS-household IFR.IPFV-PEG-be.many-PEG SFP
 6721 ‘In former times, the households (there) were many.’ (140522 tshupa, 67)

6722 Conversion from counted noun to inalienably possessed noun is also observed
 6723 when a prenominal demonstrative or adnominal clause is present, as in (93) and
 6724 (94). Conversion is however not obligatory, as shown by (95) (see additional ex-
 6725 amples in §7.1.5).

- 6726 (93) *nui u-xpa nui taχpa wuma pjy-pe*
 DEM 3SG.POSS-year DEM harvest really IFR.IPFV-be.good
 6727 ‘On that year, the harvest was really good.’ (02-montagnes-kamnyu, 72)

- 6728 (94) *[arco pui-ηu] u-sŋi nutcu tce*
 be.finished.up:FACT PST.IPFV-be 3SG.POSS-day DEM:LOC LOC
 6729 ‘The day when (the appointed time) was about to be finished,’ (2003 sras,
 6730 31)

- 6731 (95) *tcendyre nur tuu-sŋi nuunu muu-pjy-ko*
 LNK DEM one-day DEM NEG-IFR-defeat
 6732 ‘On that day, he failed in his attempt (to force her to take him with her).’
 6733 (02-deluge2012, 73)

6734 Finally, in the case of counted nouns expressing body-based units of length,
 6735 conversion to an inalienably possessed noun has a very specific meaning. These
 6736 units have a value that depends on the person of reference (few pairs of people
 6737 have exactly the same handspan). The possessive prefix serves to indicate the
 6738 person whose body part serves as the reference as in *a-tya* ‘my handspan’ in (96).
 6739 It is the only case that a counted noun converted to inalienably possessed noun
 6740 can take a possessive prefix other than 3SG.

- 6741 (96) *kur-zri* *nura, tur-tya ma* *kuki canṭas*
 SBJ:PCP-be.long DEM:PL one-span apart.from DEM.PROX up.from
 6742 *mr-zri, azo a-tya* *jamar ci ma* *me.*
 NEG-be.long:FACT 1SG 1SG.POSS-span about one apart.from not.exist:FACT
 6743 'As for its length, it is at most one handspan, only the length of my
 6744 handspan.' (28-tshAwAre, 53)

6745 Conversion from inalienably possessed noun to counted noun also exists, but
 6746 is very marginal in Japhug. When inalienably possessed nouns are converted to
 6747 counted nouns referring to a quantity, they are alienabilized (§5.1.2.9) and the
 6748 numeral prefixes are added to the noun stem with its indefinite possessor prefix.
 6749 For instance, the counted noun *tui-tui-kur* 'one mouthful' (example 76 p.265) or
 6750 *tui-tr-ste* 'one bladder of' (97) are derived from the body part inalienably possessed
 6751 nouns *tui-kur* 'mouth' and *tr-ste* 'bladder'.

- 6752 (97) *tce bduxpanaxpu yui ui-me* *yui nui, tui-ci*
 LNK ANTHR GEN 3SG.POSS-daughter GEN DEM INDEF.POSS-water
 6753 *tui-tr-ste, tyrcos surna ci to-rku-nui,*
 one-INDEF.POSS-bladder clay figurine INDEF IFR-put.in-PL
 6754 'They gave to Gdugpa Nagpo's daughter a bladder full of water and a clay
 6755 figurine (to take with her on the road, as her dowry).' (2003smanmi-tamu,
 6756 115)

6757 Direct conversion from inalienably possessed noun to counted noun without
 6758 alienabilization is rarer, and it is not always obvious whether the inalienably
 6759 possessed noun, or the counted noun is primary. For instance, the counted noun
 6760 *tui-qiu* 'one half' (see §7.6.1) is likely to have been derived from the inalienably
 6761 possessed noun *ui-qiu* 'half', but the other directionality cannot be excluded.

6762 Clearer cases is provided by the inalienably possessed *ui-mdor* 'colour' (from
 6763 Tibetan རྩྰ ཡོག 'colour'), which derives a counted noun with the numeral pre-
 6764 fix *kyntchui-* 'many' (on which see §7.3.1.4) in (98), and the native inalienably pos-
 6765 sessed noun *tr-kar* 'wing' from which the counted noun *tui-kar* 'the length of one
 6766 arm' originates (§7.4).

- 6767 (98) *tceri kyntchui-tuup^hu, kyntchui-mdor yzru.*
 but many-types many-colour exist:SENS
 6768 'There are many types (of the mushrooms called *tuqejmry*), and with
 6769 many colours.' (24-zwArqhAjmAG, 50)

6770 7.3.4.2 Counted nouns and alienably possessed nouns

6771 Alienably possessed nouns designating containers can be converted to a partitive
 6772 counted nouns by adding the numeral prefixes to the noun stem. For instance,
 6773 the noun *kʰutsa* ‘bowl’ has a corresponding counted noun *tu-kʰutsa* ‘one bowl’
 6774 as in (99).

- 6775 (99) *tu-kri tu-kʰutsa pjy-tu*
 INDEF.POSS-oil one-bowl IFR.IPFV-exist
 6776 ‘They had one bowl (full) of oil.’ (140501 mdzadi, 6)

6777 The same is true of nouns borrowed from Tibetan and Chinese such as *pʰoŋ*
 6778 ‘bottle’ (from 瓶 <píng> ‘bottle’). As an alienably possessed noun, *pʰoŋ* designates
 6779 the bottle itself (not its content), and takes postnominal numerals (as in 100).

- 6780 (100) *pʰoŋ kuβde yyzu*
 bottle four exist:SENS
 6781 ‘There are four bottles.’ (elicited; can refer for instance to empty bottles)

6782 Converted to a counted noun *tu-pʰoŋ* ‘one bottle’ it refers to the quantity of
 6783 liquid contained in a bottle, and typically follows a mass noun as in (101).

- 6784 (101) *cʰa kuβde-pʰoŋ pjy-k-γ-ta-ci.*
 alcohol four-bottle IFR.IPFV-PEG-PASS-put-PEG
 6785 ‘There were four bottles (full) of alcohol.’ (140510 sanpian sheye-zh, 51)

6786 The derivation process is quite productive, and potentially new counted nouns
 6787 meaning ‘a ... full of’ can be derived from any alienably possessed noun if a mean-
 6788 ing can be made out of it, as in *tu-co* from *co* ‘valley’ in (102), which means in
 6789 this particular context ‘an entire valley full of ...’.

- 6790 (102) *mbro tu-co kui-fse, qazo tu-co kui-fse nu,*
 horse one-valley SBJ:PCP-be.like sheep one-valley SBJ:PCP-be.like DEM
 6791 *fsapax rmurmi zo nu tu-co ny tu-co zo*
 animal all.kinds EMPH DEM one-valley LNK one-valley EMPH
 6792 *pui-tu pui-ŋu.*
 PST.IPFV-exist SENS-be
 6793 ‘There was one valley entirely for each species of animals, like one
 6794 valley full of horses, one valley full of sheep.’ (2005 Kunbzang, 189)

6795 7.3.4.3 Counted nouns and verbs

6796 The derivation of verbs into counted nouns and that of counted nouns into verbs
 6797 are both productive processes in Japhug.

6798 Counted nouns of verbal origin are either built by adding a numeral prefix
 6799 to the verb stem (as *tuu-fkur* ‘one load’ from *fkur* ‘carry on the back’) or to the
 6800 verb stem with an additional prefix *tr-* (*tuu-tryrmwu* ‘one heap’ from the transitive
 6801 verb *rmbwu* ‘heap up’, §16.4). Note also the simultaneous action nominal with two
 6802 prefixes *tuu-tuu-*, which can be analyzed as involving a counted noun derived from
 6803 a verb (§16.4.3).

6804 Most deverbal counted nouns are from transitive verbs, but examples from in-
 6805 transitive verbs are also found. For instance, in (103) the counted noun *tuu-ts^hoz*
 6806 ‘one complete set’ (from the stative intransitive verb *ts^hoz* ‘be complete’) trans-
 6807 lates Chinese 一整套 <yizhēngtào> ‘one complete set’.

- 6808 (103) *numuu kuu icq^ha* *rŋual kuu tuu-ŋga*
 6809 DEM ERG the.aforementioned silver ERG INDEF.POSS-clothes
t^hwi-ky-βzu *ci* *tuu-ts^hoz* *pjx-βde*.
 6810 AOR-OBJ:PCP-make INDEF one-complete.set IFR-throw.down
 6811 ‘(The bird) threw her a complete set of clothes that had been made in
 silver.’ (140504 huiguniang-zh, 111)

6812 Deverbal counted nouns are either partitive counted nouns (§7.3.2.1), designat-
 6813 ing a quantity of objects resulting from the action of the verb (for instance *tuu-fkur*
 6814 ‘one load’ or *tuu-trytsuy* ‘one pile’ from *rtsuy* ‘pile up’ as in 104) or semelfactive
 6815 counted nouns (§7.3.2.5), referring to the number of time an iterative/semelfac-
 6816 tive action takes place (such as *tuu-tryt^huu* ‘hitting with the hoe one time’ from
 6817 *te^huu* ‘hit, gore’).

- 6818 (104) *cyruu nuu bnuu-trytsuy to-βzu-ndzi tce*
 6819 bone DEM two-pile IFR-make-DU LNK
 ‘They had make two piles from the bones.’ (2002nyimavodzer, 126)

- 6820 (105) *qaʂ tuu-tryt^huu* *ta-lxt*
 6821 hoe one-hitting.with.hoe AOR:3→3'-throw
 ‘He used the hoe one time.’ (2003qachga, 166)

6822 There also are more lexicalized and synchronically less obvious examples of
 6823 counted nouns derived from verbs. For instance the temporal counted noun *tuu-
 6824 xpa* ‘one year’ originates from the intransitive verb *pa* ‘pass X years’ illustrated

in (106) (see also example 117 in §22.4.1.4 and the account of the *-x-* element in *tuu-xpa* proposed in in §7.3.1.7).

- (106) *k^ha na-βde nuu sqamnuuz to-pa tce*
 house AOR:3→3'-leave DEM twelve IFR-pass.X.years LNK
 ‘Twelve years had passed since she had left home.’ (150828 huamulan-zh,
 126)

Since Situ, Zbu and Tshobdun all have cognates of *tuu-xpa* ‘one year’, this non-trivial derivation must have occurred at the time of their common ancestor, but not earlier. Other Burmo-Gyalrongic languages, even Horpa and Khroskyabs (Jacques et al. 2017) have a root related to Japhug *pa* ‘pass X years’ for time ordinals (§7.5.2), but not for the corresponding counted noun.

Derivation of transitive verbs from counted nouns with the denominal prefix *r̥-* is well-attested, for instance *r̥tya* ‘measure by handspan’ from *tuu-tya* ‘one span’. A complete list of these verbs and the various meanings of this derivation is presented in §20.4.2.

7.3.4.4 Counted nouns and ideophones

Deideophonic counted nouns are quite common, and belong to all major functional categories described above. In the following discussion, ideophones (§10.1) are by default cited in pattern II (§10.1.2.2), though other patterns are mentioned in some cases where appropriate.

The collective counted nouns *tuu-boꝝ* ‘one group’ and *tuu-juy* ‘one pack’ originate from the ideophonic roots found in *boꝝboꝝ* ‘in group, in order’ and *juyjuy* ‘in great number (of long objects)’, respectively. The presence of plain voiced initial stops in these roots is a clue to their ideophonic origin (§10.1.5.1).

The semelfactive/iterative counted noun *tuu-t̥xur* ‘one turn’ comes from the ideophonic root of *xurxur* ‘round’ (pattern III *xurnyxur* ‘turning around’) with an additional prefix *t̥-*. This prefix is possibly the trace of an intermediate stage as an inalienably possessed noun, with a two-step derivation IDEOPHONE → inalienably possessed noun → counted noun.

Direct derivation from ideophone to semelfactive counted noun is also attested, for instance *tuu-kum* ‘one period of sleep’ (107) from the root in *kumkum* ‘have a nice sleep’ without the *t̥-* prefix.

- 6856 (107) *li tufsyk^ha tce tu-tum pjv-nuzuw^h tce li w-jm^ho*
 again dawn LNK one-sleep IFR-sleep LNK again 3SG.POSS-dream
 6857 *ko-ntc^hyr tce*
 IFR-appear LNK
 6858 '(The mother was so worried she could not sleep all night.) At dawn, she
 6859 had a little sleep and had again a dream.' (Norbzang 2012, 186)

6860 7.4 Measures

6861 Measures of size, weight and volume are mainly expressed by counted nouns,
 6862 though some unpossessible nouns are also found.¹⁰ Most of these words are
 6863 falling out of use, and being replaced by Chinese words, or calques from Chi-
 6864 nese.

6865 Table 7.11 presents the counted nouns used in Japhug for measures of lengths.
 6866 The obsolete forms are indicated in brackets. The counted nouns *tuu-tya* 'one span'
 6867 and *tuu-jom* 'the length of two outstretched arms' are very commonly used in nar-
 6868 ratives and conversations (their Chinese equivalents are 一拃 <yīzhǎ> 'one span'
 6869 and 一庹 <yītuǒ> 'the length of two outstretched arms', respectively). There are
 6870 two ways to measure the handspan, *ndzotya* 'length between the thumb and the
 6871 forefinger' and *nastyi* 'length between the thumb and the middle finger'; these
 6872 nouns are followed by the *tuu-tya* when one wants to specify which of the mea-
 6873 sures one chooses, as in *nastyi tuu-tya*. The counted noun *tuu-var* 'the length of one
 6874 arm' (related to *tr-var* 'wing') is less common than the other ones in Table 7.11
 6875 but attested for instance in (108).

- 6876 (108) *tsuku tce tce tuu-jom kumy tu-zri*
 some LNK LNK one-length.of.two.outstretched.arms even IPFV-be.long
 6877 *múj-c^ha, tuu-var jamar, tuu-var tce tce kuiki*
 NEG:SENS-can one-arm.length about one-arm.length LNK LNK DEM:PROX
 6878 *jamar, kuiki jamar tu-zri jw-c^ha.*
 about DEM:PROX about IPFV-be.long SENS-can
 6879 'Some of them cannot even grow up to the length of one fathom, they
 6880 can only grow up to the length of one arm, this much.' (16-RIWmsWSi,
 6881 122-124)

6882 The counted noun *tuu-tununa* 'one mile' derives from the *tuu-* actional nomi-
 6883 nal (§16.4.1) of the verb *nuna* 'rest', designating a milestone on the road indicat-
 6884 ing travellers' resting places (at regular intervals). Distances are counted now

¹⁰Measures of time are discussed in §7.5.

Table 7.11: Units of length

<i>tuu-tya</i> ‘one span’
(<i>tuu-kʰa</i> ‘one foot’)
<i>tuu-var</i> ‘the length of one arm’
<i>tuu-jom</i> ‘the length of two outstretched arms’
(<i>tuu-tumuna</i> ‘one mile’)

however only in kilometers using Chinese (including Chinese numerals), as for instance the expression 三公里 <sāngōnglǐ> ‘three kilometers’ in (109).

- (109) *a-pi tce^heme nuntu mbarkhom uu-rku*
 1SG.POSS-elder.sibling girl DEM Mbarkham 3SG.POSS-side
 <xiaoshuigou> <sangongli> *nuntcu t^huu-ye.*
 ANTHR three.kilometers DEM:LOC AOR:DOWNSTREAM-come[II]
 ‘My elder sister came to Xiaoshuigou, three kilometers from Mbarkham.’
 (140501 tshering scid, 40)

Not all nouns of measure are counted nouns. In traditional stories, the unpossible noun *χpaxtsʰyt* ‘yojana’ from Tibetan བ୍ୟାଙ୍କୁ: *dpag.tsʰad* ‘yojana’ occurs to designate a mythical measure of distance taken from Indian sources. Numerals are indicated as postnominal numeral modifiers as in (110).

- (110) *tui-sŋi χpaxtsʰyt kungut juu-tú-wy-tsum cʰa*
 one-day yojana nine IPFV:WEST-2-INV-take.away can:FACT
 ‘(This horse) can carry you (west) nine yojana in one day.’ (2003smanmi,
 57)

For measuring the surface of fields, the term *tui-rkoyčyl*, illustrated by example (111), is still in use.

- (111) *myzui tui-rkoyčyl jamar tce ky-clu*
 more one-unit.of.field.surface about LNK INF-plow
lu-jyy juu-ŋu
 IPFV:UPSTREAM-finish SENS-be
 ‘One more unit and the plowing will be finished.’ (elicited)

In the traditional society, cereals were more often measured by volume (using containers of various size) than by weight, an action called *c̥tso* ‘measure by

6905 scooping'. Table 7.12 presents the known units of volume.¹¹ Among them, *χtsiu*
 6906 'bushel' and *cpsyo* 'ten bushels' occurs as either alienably possessed or counted
 6907 nouns. The relationship between the units of volume is described in (112).

Table 7.12: Units of volume

<i>tu-χtsiu</i> 'one bushel'
<i>tu-cpsyo</i> 'ten bushels'
<i>tu-yna</i> 'thirty bushels'
<i>tu-po</i> 'one dou'

- 6908 (112) *squi-χtsiu tce tce nui cpsyo nui-ŋu. tce tu-cpsyo*
 ten-bushel LNK LNK DEM ten.bushels SENS-be SENS-be ten.bushels
 6909 *nui-ŋu. cpsyo nui tce tce, myzwi fsuisqui-χtsiu*
 SENS-be ten.bushels DEM LNK LNK even.more thirty-bushel
 6910 *a-tx-ypupa tce tce nui tu-yna. tce nui*
 IRR-PFV-accumulate LNK LNK DEM one-thirty.bushels LNK dem
 6911 *tu-yna pjy-ŋu tce tce nui canṭas*
 one-thirty.bushels IFR.IPFV-be LNK LNK DEM up.from
 6912 *u-sy-ctṣo pjy-me tce,*
 3SG.POSS-NMLZ:oblique-measure IFR.IPFV-not.exist LNK
 6913 'Ten bushels was a *cpsyo*, after the *cpsyo*, thirty bushels put together was a
 6914 *tu-yna*. After that, there was no container used to measure (grains).'
 6915 (140515 rJama, 29-33)

6916 The units of weight include *tu-sraj* 'one ounce' (from Tibetan སྙା *sraj* 'ounce'),
 6917 *rjyṛpçṛt* 'half pound' (from the first syllable of རྒྱାମା *rg'a.ma* 'scales' with མର *pʰed*
 6918 'half') and the counted noun *tu-turpa* 'one pound' derived from *turpa* 'axe' (see
 6919 §7.3.4.2).¹²

¹¹ Among these units, *tu-po* 'one dou' apparently comes from Tibetan ཡྲྷྲ *abo* 'unit of measure' corresponding to Chinese 一斗 <yidou> 'one dou' (about ten liter in the metric system). The other units are native words.

¹² This may be an ancient calque from 斤 <jin> 'pound', which also meant 'axe' in Old Chinese. Apart from *tu-turpa* 'one pound', all technical terms related to weighing are from Tibetan (including *rjama* 'scales' and *skṛr* 'weigh').

- 6920 (113) *kuicungur rjama ui-tas tce, kurc^v-sraŋ tce*
in.former.times weighing.scales 3SG.POSS-ON LNK eight-pound LNK
6921 *rjy-pcxt, sqapry-sraŋ tce tui-turpa pjy-ŋu.*
half.pound sixteen-ounce LNK one-pound IFR.IPFV-be
6922 ‘In former times, on the scales, one half pound was eight ounces, and
6923 one pound was sixteen ounces.’ (140515 rJama, 2-3)

6924 7.5 Counting time

6925 7.5.1 Temporal counted nouns

6926 Japhug has native counted nouns for time durations related to solar and lunar
6927 cycles: *tui-xpa* ‘one year’, *tui-sla* ‘one month’, *tui-sŋi* ‘one day’, *tx-rzaŋ* ‘one night’
6928 (also used to express 24 hours). There are no native concepts for ‘weeks’ or ‘ten
6929 days’; the expression of hours is presented in §7.5.4. Other temporal counted
6930 nouns include *tui-mnuutsi* ‘one lifetime’ (from ཡི་ཚེ mi.ts^he ‘human life’), *tui-tupcurn-
6931 t^haŋ* ‘one generation’ and *tui-rzuy* ‘one section, one instant’, and *tui-skurma* ‘one
6932 minute’ (from Tibetan གකར་ma ‘star, minute’)

6933 The temporal counted nouns *tui-sŋi* ‘one day’ and *tx-rzaŋ* ‘one night’ are com-
6934 monly used in apposition with the same numeral prefix to express the meaning
6935 ‘X days and X nights’, as in (114).

- 6936 (114) *χsui-sŋi χsy-rzaŋ zo pjy-ryzi*
three-day three-night EMPH IFR.IPFV-stay
6937 ‘He stayed there for three days and three nights.’ (2011-13-qala, 16)

6938 To express the meanings corresponding to English ‘after’ or ‘later’ with a time
6939 span, the idiomatic way in Japhug is to use verbs such as *tsu* ‘pass (of time)’, as
6940 shown by example (115) and (116). Note that *tsu* ‘pass (of time)’ is a semi-transitive
6941 verb (§14.2.3) whose semi-object is the time period expressed by the counted
6942 noun, and whose subject is the person affected by the passing of time (see for
6943 instance 116 with 1SG indexation).

- 6944 (115) *ui-tui-yr-wxti pjy-saxaŋ zo tui-sŋi*
3SG.POSS-NMLZ:DEG-FACIL-be.big IFR.IPFV-be.extremely EMPH one-day
6945 *tx-ts^h tce, χsui-sŋi tx-kui-ts^h to-fse. χsui-sŋi*
AOR-pass LNK three-days AOR-SBJ:PCP-pass IFR-be.like three-day

7 Numerals and counted nouns

- 6946 *ty-tsu tce, tur-sla ty-kui-tsu to-fse. tur-sla*
 AOR-pass LNK one-month AOR-SBJ:PCP-pass IFR-be.like one-month
- 6947 *ty-tsu tce, tuu-xpa ty-kui-tsu to-fse.*
 AOR-pass LNK one-year AOR-SBJ:PCP-pass IFR-be.like
 'He grew extremely fast, one day after (he was born) he looked like (an infant) who was three days old, after three days he looked like a (baby) who was one month old, after one month he looked like a (toddler) who was one year old.' (2012 Norbzang, 120-123)
- 6952 (116) *tc^horzi u-ŋgu* *c^huu-kui-rku-a,* *χsy-rzaš*
 jar 3SG.POSS-inside IPFV:DOWNSTREAM-2→1-put.in-1SG three-days
- 6953 *ty-tsu-a tce ci a-ty-kui-rtov-a,*
 AOR-pass-1SG LNK once IRR-PFV-2→1-look-1SG
 'Put me in a jar, and three days later have a look at me.' (2003 Kunbzang, 385)
- 6956 The postposition *cuŋgu* 'before' (§8.2.11) occurs after temporal counted nouns
 6957 in examples such as (117) (see also 157 below); the relator noun *u-q^hu* 'after' (§8.3.5)
 6958 is not used in this way except in texts translated from Chinese (where it is likely
 6959 calqued) as in (118).
- 6960 (117) *kungusqui-xpa cuŋgu nura tc^heme ra wuma zo kui-tas*
 nine.ten-years before DEM:PL girl PL really EMPH SBJ:PCP-weave
 6961 *pua-dyn*
 PST.IPFV-be.many
 6962 'Nine or ten years ago, there were many weavers among women.'
 6963 (thaXtsa2002, 100)
- 6964 (118) *kuiβdx-xpa u-q^hu tce kutcu tu-ky-rwuuwum*
 four-year 3SG.POSS-after LNK here IPFV-INF-RECIP:gather
 6965 *to-nui-pa-nui.*
 IFR-AUTO-make-PL
 6966 'They agreed to meet again at this place in four years.' (140508 benling
 6967 gaoqiang de si xiongdi-zh, 23)
- 6968 In order to express meanings such as 'beginning' or 'end' of a time period
 6969 indicated by a counted noun, verbs such as *arčo* 'be finished' are used as in (119)
 6970 instead of nouns or participles like *u-syŋjy* 'its end'.

- 6971 (119) *yuijpa tu-xpa nuv-yrco cunŋgu tce, <lunwen> ky-ryt*
 this.year one-year IPFV-be.finished before LNK dissertation INF-write
 6972 *pju-jyŋ jnu-ra.*
 IPFV-finish SENS-be.needed
 6973 ‘He has to finish writing his dissertation before the end of this year.’
 6974 (elicitation)

6975 Temporal counted nouns are generally used on their own without head noun.
 6976 The counted noun *tu-xpa* ‘one year’ however does occur with the noun *lu* ‘year’
 6977 (from Tibetan ལོ ‘year’) in some traditional stories as in (120).

- 6978 (120) *lu χsui-xpa pui-ŋke-j pui-ra ri,*
 year three-year PST.IPFV-walk-1SG PST.IPFV-be.needed LNK
 6979 ‘We had to walk for three years.’ (sras2003, 58)

6980 The temporal counted nouns *tu-sla* ‘one month’ and *tu-xpa* ‘one year’ have
 6981 the special forms *krry-sla* ‘several months’ and *krry-sla* ‘several years’ as in (121)
 6982 and (122) with what appears to be a numeral prefix *krry-* ‘several’.¹³ This prefix
 6983 cannot however be used with any other counted nouns, even *tu-sŋi* ‘one day’.

- 6984 (121) *tui-ji u-ŋgwa krry-xpa zo*
 INDEF.POSS-field 3SG.POSS-inside several-years EMPH
 6985 *pui-a-nui-rku kuny, pju-tsyi my-cʰa.*
 PST.IPFV-PASS-AUTO-put.in also IPFV-rot NEG-can:FACT
 6986 ‘Even if it remains in (the ground of) the field for several years, it does
 6987 not rot.’ (08-qajAGi, 37)

- 6988 (122) *krry-sla zo tui-ŋga ra ma-nú-wy-χtei qʰe*
 several-months EMPH INDEF.POSS-clothes PL NEG:IRR-PFV-INV-wash LNK
 6989 *tce zruy ku-βze cti.*
 LNK louse IPFV-grow be.AFF:FACT
 6990 ‘If one does not wash clothes for several months, lice will grow in it.’
 6991 (21-mdzadi, 51)

6992 7.5.2 Time ordinals

6993 Japhug has two series of time ordinals, one for days (Table 7.13) and another one
 6994 for years (Table 7.14). In the following discussion, I adopt Michailovsky’s (2003)

¹³These two counted nouns are also compatible with the approximate numeral prefix *laŋnuu-* ‘a few’ as in *laŋnuu-sla* ‘a few months’ and *laŋnuu-xpa* ‘a few years’ (§7.2).

6995 notations: $D^{-\alpha}$ ‘ α day(s) ago’, $D^{+\beta}$ ‘in β day(s)’, $Y^{+\gamma}$ ‘ γ year(s) ago’, $Y^{+\delta}$ ‘in δ
6996 year(s)’.

Table 7.13: Japhug day ordinals

Day	Time ordinal expression
-2	<i>juufçundzi</i> ‘the day before yesterday; the other day’
-1	<i>juufçur</i> ‘yesterday’
0	<i>jisŋi</i> ‘today’
+1	<i>fso</i> ‘tomorrow’
+2	<i>fsyndi</i> ‘the day after tomorrow’
+3	<i>qʰyndi</i> ‘in three days’
+4	<i>jrndi</i> ‘in four days’
+5	<i>βzindi</i> ‘in five days’
+6	<i>pytsyndi</i> ‘in six days’

6997 The Japhug system has relatively few ordinals for past days and years (some
6998 Kiranti languages have terms for up to D^{-6} and Y^{-4} , as shown by Michailovsky
6999 2003), but stands out by having six ordinals for future years (no Kiranti languages
7000 has more than D^{+6} and Y^{+4} in Michailovsky’s 2003 data). However, the D^{+5} *βzindi*
7001 ‘in five days’, D^{+6} *pytsyndi* ‘in six days’ and the corresponding year ordinals Y^{+5}
7002 and Y^{+6} are not used any more in day-to-day speech even by the eldest speakers.

7003 The D^0 to D^{-2} and Y^0 to Y^{-2} ordinals have a prefix *ji-/juu-/ja-*, which is probably
7004 of demonstrative origin. This prefix also occurs in the derived ordinals *juymur*
7005 ‘this evening’ and *juxço* ‘this morning’ (see Tables 7.15 and 7.16 below), as well
7006 as in some frozen adverbs, such as *jvxtsʰi* ‘this time’ (from *tuu-xtsʰi* ‘one time’)
7007 and *jinde* ‘these days’. Cognates of this prefix are found in other time ordinals
7008 elsewhere in Gyalrongic. In the case of *yujpa* ‘this year’, this prefix surfaces as
7009 a preinitial *-j-* to the root *-pa* ‘year’ (see §7.3.1.7 on the etymology of this noun).
7010 The *yu-* (from **wə-*) prefix may be cognate to the prefix *pə-* in *pəvə* ‘this year’ and
7011 *pəsŋə* ‘today’ in Stau.

7012 The expressions *juufçundzi* ‘two days ago’ and *japandzi* ‘two years ago’, which
7013 are based on the D^{-1} and Y^{-1} forms with a suffix *-ndzi*, can be analyzed as time
7014 ordinals (D^{-2} and Y^{-2} , respectively), as in (123).¹⁴

¹⁴This suffix *-ndzi* is not attested elsewhere, but is probably related to the syllable *-ri* of the relator noun *u-βyri* ‘in front of; before’, from an earlier **n-ri* with epenthesis (**ndri*) and fricativization of the resulting **dr* cluster.

Table 7.14: Japhug year ordinals

Year	Time ordinal expression
-2	<i>japandzi</i> ‘two years ago; a few years ago’
-1	<i>japa</i> ‘last year’
0	<i>yujpa</i> ‘this year’
+1	<i>fsaq^he</i> ‘next year’
+2	<i>fsyndypa</i> ‘in two years’
+3	<i>q^hsyndypa</i> ‘in three years’
+4	<i>jsyndypa</i> ‘in four years’
+5	<i>βzindyra</i> ‘in five years’
+6	<i>pytsyndypa</i> ‘in six years’

- 7015 (123) *nuu ma kui-dyn japa muu-tx-χtui-t-a.*
DEM apart.from SBJ:PCP-be.many last.year NEG-AOR-buy-TR:PST-1SG
7016 *japandzi alo, taltcym kui z-px-car tcendyre*
two.years.ago upstream ANTHR ERG TRAL-IFR-search LNK
7017 ‘Last year, it did not buy a lot (of edible fern). The year before, up there
7018 (in Kamnyu), Lhalcam collected some.’ (conversation, 14.05.10)

7019 However, in many cases, they have less specific meanings such as ‘a few days
7020 ago’ and ‘a few years ago’, as shown by (124), referring to an event that had
7021 occurred more than one week before.¹⁵

- 7022 (124) *jufcundzi puu-tuu-χcu-ndzi ma, a-ŋga*
last.days AOR-2-be.strong-DU LNK 1SG.POSS-clothes
7023 *ly-tuu-suu-yut-ndzi nuu, a-xtsa nuu wuma puu-pe tce*
AOR-2-CAUS-bring-DU DEM 1SG.POSS-shoe DEM really SENS-be.good LNK
7024 *nuu ku-nuu-ŋge-a, a-tsa wuma puu-βze*
DEM PRS-AUTO-wear[III]-1SG 1SG.POSS-adapted really SENS-make[III]
7025 ‘Thank you both for the other day, the clothes that you have sent me,
7026 the shoes are very nice, I wear them, they are my size.’ (conversation,
7027 15.04.18)

¹⁵This use reminds of the English expression ‘a couple of days ago’, which can mean up to a week ago.

7028 Even the Y^{-1} ordinal *japa* ‘last year’ can have a less specific meaning if com-
 7029 bined with *dal* ‘early’ and the locative *ri* as *japa dal ri* ‘a few years ago’ as in (125).
 7030 No other time ordinal can be used with *dal* ‘early’ or other modifiers.

- 7031 (125) *japa dal ri ftcar ri bmbiyuzum yzsu nui-ti-nui ma*
 7032 last.year early LOC summer LOC solar.eclipse exist:SENS SENS-say-PL
 7033 ‘A few years ago, they said there was a solar eclipse during summer.’
 (29-RmGWzWn2, 27)

7034 The day ordinals from D^{+2} to D^{+5} contain a suffix *-ndi*, which attaches to the
 7035 *status constructus* forms of *fso* ‘tomorrow’ in D^{+2} *fsyndi* and *w-q^hu* ‘after’ in D^{+3}
 7036 *q^hyndi*. The D^{+5} form *βzindi* contains the *status constructus* *βzu-* of the Japhug
 7037 pronunciation *βzi* of the Tibetan numeral ད୍ୱ ཚ୍ୡ ‘four’ (see §7.1.1), presumably
 7038 meaning ‘the fourth day after tomorrow’.

7039 Year ordinals from Y^{+2} to Y^{+5} (Table 7.14) are built by simply adding the root
 7040 *-pa* ‘year’ (see §7.3.1.7 and § 7.3.4.3) to the *status constructus* of the corresponding
 7041 day ordinals D^{+2} to D^{+5} . The Y^{+1} time ordinal *fsaq^he* ‘next year’ comes from the
 7042 *status constructus* of *fso* ‘tomorrow’, and the second element may be from the
 7043 counted noun *w-q^hu* ‘after’ followed by the locative suffix **-j* with regular vowel
 7044 fusion (§8.2.4.4).

7045 In addition, there are morning ordinals (Table 7.15) which derive from the cor-
 7046 responding day ordinals by adding the noun *soz* ‘morning’ (with the exception
 7047 of *juxçeo* ‘this morning’), and the evening and night ordinals (Table 7.16) which
 7048 are built by adding the bound form *-mur* (found in *tui-ymur* ‘one evening’ and
 7049 *murkurku* ‘every evening’). These ordinals are not attested after D^{+3} , though the
 7050 forms could be built easily; note the absence of *status constructus*, except for D^{-1} ,
 7051 where *jufçuur* ‘yesterday’ loses its coda, as in *jufçeu^hoz* ‘yesterday morning’.

7052 Note the isolated *q^huj* ‘this afternoon’ (Table 7.16), which can refer to the time
 7053 period between noon and the night (including the early evening).

7054 As shown by (126), it is also possible to combine day ordinals with other time
 7055 nouns such as *turmuu* ‘dusk’ to indicate particular moments of previous or future
 7056 days.

- 7057 (126) *jufçeu^hndzi-mur ny-pi kui-wxti ui-ta^h*
 7058 *two.days.ago-evening 2SG.POSS-elder.sibling SBJ:PCP-be.big 3SG.POSS-on*
ko-nqo^ha ri mu-tý-wy-tsum-a, jufçuur turmu^h
 7059 *IFR-hang-1SG LNK NEG-AOR:UP-INV-take.away-1SG yesterday dusk*
tce ny-pi tuiyt nui ui-ta^h ko-nqo^ha
 LNK 2SG.POSS-elder.sibling second.sibling DEM 3SG.POSS-on IFR-hang-1SG

Table 7.15: Morning ordinals

Day	Morning ordinal
-2	<i>jufçundzisoz</i> ‘the morning of two days ago’
-1	<i>jufçusoz</i> ‘yesterday morning’
0	<i>juçço</i> ‘this morning’
+1	<i>fsosoz</i> ‘tomorrow morning’
+2	<i>fsyndisoz</i> ‘in two days in the morning’
+3	<i>qʰyndisoz</i> ‘in three days in the morning’

- 7060 *ri mu-tý-wy-tsum-a* *tce, juymur* *ndyre* *nyzo*
 LNK NEG-AOR:UP-INV-take.away-1SG LNK this.evening TOP.ADVERS 2SG
 7061 *tu-kui-tsum-a* *ra*
 IPFV:UP-2→1-take.away-1SG be.needed:FACT
 7062 ‘Two days ago, during the evening, I clung onto your eldest sister but
 7063 she did not take me away (to heaven), yesterday at dusk I clung onto
 7064 your second eldest sister but she did not take me away, this evening
 7065 take me away.’ (07-deluge, 55)

Table 7.16: Evening ordinals

Day	Evening	Night
-2	<i>jufçundzimur</i> ‘the evening of two days ago’	
-1	<i>jufçumur</i> ‘yesterday evening’	<i>jufçucyr</i> ‘yesterday night’
0	<i>qʰuj</i> ‘this afternoon’, <i>juymur</i> ‘this evening’	
+1	<i>fsomur</i> ‘tomorrow evening’	
+2	<i>fsyndimur</i> ‘in two days in the evening’	
+3	<i>qʰyndimur</i> ‘in three days in the evening’	

- 7066 Time ordinals can be used either on their own as (123), (124) or (126) above,
 7067 or be followed by the linker *tce* as in (127). They are never used with the loca-
 7068 tive postpositions *ri*, *zuu*, or *tçu* (which are used to mark some temporal adjuncts,
 7069 §8.2.4.1), except for the D^{-1} , S^{-2} , Y^{-1} and Y^{-2} ordinals which can occur with *ri*,
 7070 as in (128).

7 Numerals and counted nouns

- 7071 (127) *fsyndi tce li kumab ji-ky-nyma yyzu*
 in.two.days LNK again other 1PL.POSS-OBJ:PCP-work exist:SENS
 7072 ‘After tomorrow we have something else to do.’ (conversation, 2012.12)
- 7073 (128) *japa ri tce, <hongyuan> <caizhengju> ri pui-c^ha, <kaoshi>*
 last.year LOC LNK ANTHR finance.office LOC AOR-can exam
 7074 *pui-c^ha*
 AOR-can
 7075 ‘Last year, he succeeded at the finance office in Hongyuan, at the exam.’
 7076 (12-BzaNsa, 76)
- 7077 Time ordinals can be converted to inalienably possessed nouns with the third
 7078 singular prefix *wi-* to change the reference time from the present to a point of time
 7079 in the past or a to hypothetical time reference. For instance, from *fso* ‘tomorrow’
 7080 one can build *wi-fso* ‘the next day’ or *wi-fsosji* ‘the next day’ (by adding the counted
 7081 noun *tui-sji* ‘one day’), as in (129), (130) or (131).
- 7082 (129) *wi-fso-sji tce tce li pjy-nytsob-nuu tce*
 3SG.POSS-tomorrow-day LNK LNK again IFR-dig.up.silverweed-PL LNK
 7083 ‘The next day, they dug up again silverweed roots.’ (07-deluge, 544)
- 7084 (130) *nua tui-rzab nua a-pui-nua-fse tce,*
 DEM one-night DEM IRR-IPFV-AUTO-be.like LNK
 7085 *wi-fso-soz tce wi-ci zo pui-tox*
 3SG.POSS-tomorrow-morning LNK 3SG.POSS-water EMPH IPFV-come.out
 7086 *nua-ŋu*
 SENS-be
 7087 ‘If you leave it one night, the next day in the morning the juice comes
 7088 out.’ (conversation 14.05.10)
- 7089 (131) *tce tui-ji wi-ŋgwu pjiu-nua-ce tce,*
 LNK INDEF.POSS-field 3SG.POSS-inside IPFV:DOWN-AUTO-go LNK
 7090 *wi-fsaq^he tce li tu-tox pui-ŋu tce.*
 3SG.POSS-next.year LNK again IPFV:UP-come.out SENS-be LNK
 7091 ‘(Its seed) goes into (the soil of) the field, and it grows again the next
 7092 year.’ (13-NanWkWmtsWG, 111)

7093 7.5.3 Other derived time adverbs

7094 Japhug has a series of distributive adverbs meaning ‘every/each X’ (Table 7.17).
 7095 These adverbs are derived from time nominals (mainly counted nouns, but also

alienably possessed nouns like *soz* ‘morning’) by adding a suffix *-ku* and then applying partial reduplication (§4.1). If the nominal root has a coda such as that of *-mur* ‘evening’ (as in *tū-ymur* ‘one evening’), this coda is resyllabified and undergoes reduplication together with the suffix, as in the form *murmurku* ‘every evening’ (not †*murmurku*).

The /u/ of the preceding syllable tends to become [u] due to vowel assimilation (§3.3.1.2); since vowel assimilation always occurs in the forms without a reduplicated cluster, the transcriptions *spikuku* ‘every day’ and *pakuku* ‘every year’ are used in this grammar (Table 7.17) instead of the more phonological representations /spikuku/ and /pakuku/.

These adverbs are commonly used with the emphatic marker *zo*, as in (132).

- (132) *murkurku zo kyntc^ha_b a-pi ui-p^he*
 every.evening EMPH street 1SG.POSS-elder.sibling 3SG.POSS-DAT
kua-nypyri jui-yi-a, ... pui-ηu.
 SBJ:PCP-have.supper ... PST.IPFV-be
 ‘Every evening, if would go in the town at my elder brother’s home to have supper and...’ (140501 tshering skyid, 111)

This morphological derivation is not productive, and cannot be used with any other temporal counted noun, even *tū-sla* ‘one month’ – the distributive modifiers *rayri* ‘each, every’ or *ruri* ‘each, every’ are used instead (§9.1.3.3).

Table 7.17: Distributive time adverbs

Time nominal	Adverb
<i>soz</i> ‘morning’	<i>soskusku</i> ‘every morning’
<i>tū-ymur</i> ‘one evening’	<i>murkurku</i> ‘every evening’
<i>tū-sji</i> ‘one day’	<i>spikuku</i> ‘every day’
<i>tū-xpa</i> ‘one year’	<i>pakuku</i> ‘every year’

7.5.4 Clock time

Japhug has a series of words borrowed from Tibetan that can be used to refer to hours and minutes. The alienably possessed *tuts'ot* ‘time, hour, clock’ from Tibetan བྲྱྤྱ བྲྱྤྱ *dus.ts^hod* ‘time, hour’ (note that *tū-* here is not a prefix, but represents the Tibetan syllable དྲྱ *dus* ‘time’), if directly followed by a numeral (or the generic counted noun *tū-rdoṣ* ‘one piece’) refers to hours, as in examples (133) and (134).

- 7121 (133) *cyr tuuts^hot sqamnuaz zo tce a-jy-tui-z-nytuy tce,*
 night hour twelve EMPH LNK IRR-PFV-2-CAUS-happen.to.be.at LNK
 7122 ‘You will have to make sure to be there at midnight.’ (2003qachga, 26)

- 7123 (134) *tce nunuu ci ta-cuu-mŋym nunuu tuuts^hot tuu-rdo^b jamar*
 LNK DEM one AOR:3→3'-caus-hurt DEM hour one-piece about
 7124 *myctsa my-zí.*
 until NEG-subside:FACT
 7125 ‘When (nettles) start to cause pain (to one’s body), it won’t stop for
 7126 about one hour.’ (11-*mtshalu*, 7-8)

7127 To express a length of time in minutes, the noun *tuuts^hot* ‘time, hour, clock’ is
 7128 followed by the counted noun *tu-skyrma* ‘one minute’, as in (135).

- 7129 (135) *tuuts^hot sqamŋu-skyrma, ynxsqi-skyrma jamar ty-tsú tce*
 time fifteen-minute twenty-minute about AOR-pass LNK
 7130 *ku-smi cti.*
 IPFV-be.cooked be.AFF:FACT
 7131 ‘After fifteen or twenty minutes, it is cooked.’ (160706 *thotsi*, 53)

7132 To ask about clock time, the interrogative pronoun *t^hystuy* ‘how many, how
 7133 much’ occurs with the verb *zyut* ‘reach’ as in (136) (see also §6.5.3).

- 7134 (136) *nyki nuu tuuts^hot t^hystuy ko-zyunt?*
 DEM:DISTAL DEM hour how.many IFR-reach
 7135 ‘At your place, what time is it?’ (conversation, 14.12.24 – the question
 7136 refers to the time lag between Paris and Mbarkham)

7137 These expressions, although used in the everyday language in Japhug, are
 7138 calqued from Chinese since they follow modern time counting units and are all
 7139 recent. Another calque from Chinese includes *tu-tçulyβ* ‘one unit of tobacco’ as
 7140 in (137), from the expression 一斗烟的功夫 <yī dǒu yān de gōngfū> ‘time of one
 7141 unit of tobacco’.

- 7142 (137) *t^hamaka tuu-tçulyβ ky-sko uu-ran jamar*
 tobacco one-tobacco.unit INF-smoke 3SG.POSS-time about
 7143 *nuu-ra*
 SENS-be.needed
 7144 ‘One needs about the time of a tobacco smoke.’ (elicited)

7.6 Basic arithmetic operations

Although Japhug lacks an elaborate mathematical vocabulary, is it possible to express at least the basic arithmetic operations without recourse to Chinese.

The counted noun *tuu-rdoꝝ* ‘one piece’ is used instead of the numeral *ci* ‘one’ in calculations (see 138 below).

Additions are expressed by the construction in (138) and (139),¹⁶ with the verb *ta* ‘put’ (or alternatively, *yŋju* ‘add’) and the locative noun *u-taꝝ* ‘on top of’, literally ‘If one puts Y on the top of X, it makes Z’ corresponding to $X + Y = Z$.

- (138) *kumju u-taꝝ tuu-rdoꝝ pjúu-wy-ta tce kutsy tu-βze*
 five 3SG-on one-piece IPFV:DOWN-INV-put LNK six IPFV-do[III]
ŋu.
 be:FACT

‘Five plus one equals six.’ (gram140505 math, elicitation)

- (139) *nŋzo kuçnu-kurcat nui pwaŋju ny, kuçnuaz u-taꝝ kurcat*
 2SG seven-eight DEM as.for LNK seven 3SG-on eight
pjúu-wy-ta tce sqamju nui-ŋu sqamju tce ju-tuu-nui-ce
 IPFV:DOWN-INV-put LNK fifteen SENS-be fifteen LNK IPFV-2-VERT-go
nui-ŋu tce,
 SENS-be LNK
 ‘As for the expression ‘seven eight’ (your father in law has told) you,
 seven plus eight equals fifteen, (it means that) you go back (to your
 husband’s home) in fifteen days.’ (2005tAwakWcqraR, 39)

In the case of subtractions, the main verb is *tçrt* ‘take out’ combined with the downstream orientation preverb (the preverb *c^huu-* in 140, §15.1.4.2). The minuend (*tuu-rdoꝝ* in 140) is the object of *tçrt* ‘take out’, and the subtrahend (*kumju* in 140) is encoded with the relator noun *u-ŋgu* ‘inside’ (§8.3.4.4). Alternatively, the verb *suxtç^haꝝ* ‘make diminish’, causative of *tç^haꝝ* ‘diminish’ (§17.2.1.4) can also occur (selecting the downwards orientation). The construction is exactly the same as in (140), replacing *c^huu-wy-tçrt* by *pjúu-wy-suxtç^haꝝ*.

¹⁶The form *kuçnu-kurcat* (with the numeral prefix *kuçnu-* on the numeral *kurcat* ‘eight’) in example (139) is part of a riddle in the story, and is not a normal way to express additions in Japhug.

- 7169 (140) *kumju w-ŋgwa tur-rdo^b cʰúr-wy-tcxt tce kuiβde ma*
 five 3SG-inside one-piece IPFV-INV-take.out LNK four apart.from
 7170 *ŋua-me ŋu*
 IPFV-not.exist be:FACT
 7171 ‘If one takes out one from five, only four remain = five minus one equals
 7172 four’ (gram140505 math, elicitation)

7173 Japhug is rarely used for multiplication. The counted noun *tui-zlob* ‘one time’
 7174 can convey a multiplicative meaning as in example (141). Note that this counted
 7175 noun of Tibetan origin has two alternative forms for ‘two times’, the regular *ŋmu-*
 7176 *zlob* and the hybrid form *ŋŋui-zlob* with an irregular numeral prefix that seems
 7177 influenced by the Tibetan numeral ལྔ གྲିନ୍ ཁ୍ରୀ ག୍ରୀ *gnis* ‘two’ (see §7.1.6.1, §7.3.1.5). Divisions
 7178 are treated in the section on fractions (§7.6.1).

- 7179 (141) *kuŋgut nuŋ χsum yuŋ χsuŋ-zlob ŋu*
 nine DEM three GEN three-time be:FACT
 7180 ‘Nine is three times three.’ (gram140505 math, elicitation)

7.6.1 Fractions

7182 Japhug does not have specific names for fractions other than *w-qiu* ‘half’. This
 7183 inalienably possessed noun has no prefixal form, and to express the meaning
 7184 ‘half a X’, the only available construction is the one illustrated in (142) and (143),
 7185 combining a counted noun with the numeral prefix ‘one’, the genitive *yuu* and
 7186 *w-qiu* ‘half’.

- 7187 (142) *tui-jom yuu w-qiu jamar*
 one-length.of.two.outstretched.arms GEN 3SG.POSS-half about
 7188 *ŋua-rŋji*
 SENS-be.long
 7189 ‘(Its tail) is about half a fathom (one arm) long.’ (24-ZmbrWpGa, 68)

- 7190 (143) *nunuu tui-xpa yuu w-qiu nuŋ nyr-cqʰlyt.*
 DEM one-year GEN 3SG.POSS-half DEM IFR-disappear
 7191 ‘Half a year passed.’ (150907 laoshandaoshi-zh, 98)

7192 The denominal verb *nyrqiū* ‘pass half of’ (§20.7.1) can be used with temporal
 7193 counted nouns to express the same meaning (144).

- 7194 (144) *tua-sla ny-nyqiu*
 one-month IFR-pass.half
 7195 ‘Half a month passed.’ (elicited)

7196 The additive interpretation ‘and a half’ can be expressed by coordinating the
 7197 counted noun and the inalienably possessed *u-qiu* ‘half’ using the comitative *c^ho*
 7198 ‘with’, as in (145).

- 7199 (145) *ki kua-fse tua-jom c^ho*
 DEM.PROX SBJ:PCP-be.like one-length.of.two.outstretched.arms COMIT
 7200 *u-qiu jamar kua-zri ra*
 3SG.POSS-half about SBJ:PCP-be.long be.needed:FACT
 7201 ‘They need (a piece of leather) long like one fathom and a half.’
 7202 (24-mbGo, 79)

7203 Alternatively, the additive meaning ‘and a half’ can be expressed with the
 7204 counted noun *tua-qiu* ‘one half’, which derives from *u-qiu* ‘half’ (§7.3.4.1).

- 7205 (146) *tce u-pyrt^hβ tce, tua-pyrme tua-qiu jamar, bnu-pyrme jamar*
 LNK 3SG.POSS-between LNK one-year one-half about, two-year about
 7206 *ma kua-me bja.*
 apart.from SBJ:PCP-not.exist completely
 7207 ‘(Some women had thirteen or fifteen children); between each of them,
 7208 there was only one year and a half or two years.’ (140426 tApAtso
 7209 kAnWBdaR, 89; see the preceding sentence in example 55 in §9.1.3.2)

7210 For more complex fractions, the counted nouns *tua-tucur* ‘one part’, *tua-trsum*
 7211 ‘one part’ or *tua-tukro* ‘one part’ are used. Two related constructions are possible;
 7212 in the following discussion, X represents the numerator, Y the denominator (the
 7213 fraction $\frac{X}{Y}$).

7214 The first one is a noun phrase with the structure *Y-tucur u-ŋgu X-tucur*, liter-
 7215 ally ‘X parts among Y parts’, illustrated by example (147). This may be a calque
 7216 of the Chinese construction *Y分之X* (*Y-fēn zhī-X*) literally ‘X of Y parts’, a way
 7217 of expressing fractions attested from Han dynasty documents (Anicotte 2015) to
 7218 standard Mandarin.

- 7219 (147) *kumŋu-tucur u-ŋgu χsui-tucur*
 five-part 3SG-inside three-part
 7220 $\frac{3}{5}$ = ‘Three parts among five parts.’ (elicited)

7221 An alternative possibility is to use the auxiliary verb *lxt* ‘release’ as in (148), but
 7222 such construction is biclausal (the second clause lacks a verbal predicate, §22.3).

- 7223 (148) *χsui-tuicur tú-wy-lxt tce tui-tuicur*
 three-part IPFV-INV-release LNK one-part
 7224 $\frac{1}{3}$; literally ‘Making three parts, one part.’ (elicited)

7225 Divisions can be expressed using the constructions in (149a) and (149b).

- 7226 (149) a. *sqi nuu kumnu-tuicur tú-wy-lxt tce, bnuaz ny bnuaz*
 ten DEM five-part IPFV-INV-release LNK two LNK two
 7227 *púu-wy-βzu kʰuu*
 IPFV-INV-make be.possible:FACT
 b. *sqi nuu kumnu-tuikro púu-wy-lxt tce, bnuaz ny bnuaz*
 ten DEM five-part IPFV-INV-throw LNK two LNK two
 7229 *púu-wy-syβzu kʰuu*
 IPFV-INV-transform be.possible:FACT
 7230 $\frac{10}{5} = 2$; literally ‘Making 5 parts out of 10, one can make them in sets of
 7231 two’.

7232 In these examples, the numerator is a left-dislocated numeral followed by the
 7233 determiner *nuu*, the denominator a counted noun serving as object of *lxt* ‘release’
 7234 as in the fraction in (148), and the result of the computation is indicated by a
 7235 distributive repetition of the numeral with the additive postposition *ny* (§7.3.2.3).

⁷²³⁶ 8 Postpositions and relator nouns

⁷²³⁷ Japhug is particularly poor in case-marking morphology, and grammatical relations are indicated by verbal morphology (treated in Chapter 14) combined with ⁷²³⁸ postpositions and relator nouns.¹ In this chapter, I first present the various possible ⁷²³⁹ functions of bare (absolutive) noun phrases, and then describe the uses of all ⁷²⁴⁰ postpositions and relator nouns in combination with noun phrases. Some post-⁷²⁴¹ positions and relator nouns also occur in various types of subordinate clauses ⁷²⁴² (§25.1.1). ⁷²⁴³

⁷²⁴⁴ 8.1 Absolutive

⁷²⁴⁵ In Japhug *absolutive* refers to the bare form of a noun phrase, without postpo-⁷²⁴⁶ sition, relator noun or locative suffix. This form is used for intransitive subject, ⁷²⁴⁷ object and various other grammatical functions described in this section, in par-⁷²⁴⁸ ticular goals and some locative phrases, for which locative postpositions (§8.2.4) and ⁷²⁴⁹ relator nouns (§8.3.4) are optional.

⁷²⁵⁰ 8.1.1 Intransitive subject

⁷²⁵¹ The only argument of morphologically intransitive and syntactically monoactant-⁷²⁵² ial verbs, the intransitive subject (S), is in absolutive form and is indexed on the ⁷²⁵³ verb, as *tc^heeme nura* ‘the women’ with plural indexation in (1).

- ⁷²⁵⁴ (1) *tc^heeme nura t^hwu-sta-nur*
woman DEM:PL AOR-wake.up-PL
⁷²⁵⁵ ‘The women woke up.’ (2005 Norbzang, 123)

⁷²⁵⁶ Apparent examples of ergative *kuu* with third person intransitive subjects are ⁷²⁵⁷ due to the effect of long distance ergative marking (§8.2.2.2), due to bracketing ⁷²⁵⁸ issues between main clause and complement clause (§24.3.2) or to errors, as in ⁷²⁵⁹ example (2): the intransitive *sta* ‘wake up’ only takes an absolutive argument

¹Word order also plays a minor role (§22.1).

8 Postpositions and relator nouns

7260 (as in 1 above), and the ergative *kuu* is preceded and followed by pauses, reflecting
7261 the hesitation of the narrator. As an isolated sentence, the use of ergative is
7262 considered to be ungrammatical in this example.

- 7263 (2) *nua jamar kóbmuz nua luulu nua, /ktuu/, cʰy-sta.*
DEM about only.then DEM cat DEM ERG IFR-wake.up
7264 (150826 shier shengxiao, 147)

7265 Some morphologically intransitive verbs have a second argument, which can
7266 be either absolute (semi-objects §8.1.5 or goals §8.1.8) or oblique (dative with
7267 *ru* ‘look at’, genitive with *ra* ‘be needed’ and existential verbs §8.2.3.2, comitative
7268 with *naχtçuy* ‘be like’ §8.2.5), but in all these cases the argument indexed on the
7269 verb is always in absolute form.

7270 The intransitive subject can only be relativized using subject participial rela-
7271 tives (§23.5.1).

8.1.2 Transitive subject

7272 The transitive subject (A argument) is usually marked by the ergative postposi-
7273 tion *kuu* (§8.2.2). The ergative is optional with first and second person pronouns
7274 in transitive subject function, as shown by examples such as (3), where *mto* ‘see’
7275 is a transitive verb. The use of ergative on these pronouns is however possible,
7276 especially in the case of contrastive focalization (§8.2.2.1).

- 7277 (3) *azo nua muu-puu-mto-t-a ri nua u-sŋi wuma zo*
1SG DEM NEG-AOR-see-TR:PST-1SG LNK DEM 3SG.POSS-day really EMPH
7278 *puu-γyndzo*
PST.IPFV-be.cold
7279 ‘I did not see it (the eclipse), but on that day it was very cold.’
(29-RmGWzWn2, 26)

7280 Third person transitive subjects are obligatorily marked with the ergative (§8.2.2.1).

7281 Apparent counterexamples in the corpus are due to the emphatic use of third per-
7282 son pronouns (§6.4), or to errors involving hesitations.

8.1.3 Object

7283 Morphologically transitive verbs (§14.3.1) take an object (O argument) in abso-
7284 lutive form, indexed by the verb morphology (§14.3.2). For instance *tsuku turme*
7285 *ra* ‘some people’ in (4) has no case marking, and is coreferent with the plural

7289 indexation on *kú-wy-mtsuy-nu* ‘they are stung’ (with inverse marking, §14.3.2.8).
 7290 Only absolutive phrases can be indexed as objects; there are no verbs in Japhug
 7291 indexing a postpositional phrase other than an ergatively marked transitive sub-
 7292 jects.

- 7293 (4) *tsuku turme ra kú-wy-mtsuy-nuu tce múa-j-þdaway*,
 some people PL IPFV-INV-bite-PL LNK NEG.SENS-be.serious
 7294 ‘Some people, when they are stung (by bees) are fine.’ (26-ndzWrnaR,
 7295 65-67)

7296 Objects can be relativized by object participial relatives (like semi-objects, §8.1.5)
 7297 or by finite relatives (like semi-objects, goals §8.1.8 and locative phrases §8.1.9).

7298 Most transitive verbs have a strict requirement on the semantic role of the
 7299 object. However, speakers can in limited cases select an object with a different
 7300 role with stylistic effect. For instance, the verb *zmbri* ‘play’ (an instrument), ‘make
 7301 noise with’ normally takes a object a musical instrument or any other noise-
 7302 making implement (§17.2.2.4), as in (5a). However, in the next sentence of the
 7303 same story (5b), this verb appears with the phrase *wu-mu c^ho ndzi-ky-ndza ky-ts^hi kuu-*
 7304 *dwi~dyn* ‘a lot of food and drink for (him) and his mother’ as object, a resultative
 7305 construction: the direct object is not the instrument used to make the noise, but
 7306 rather the boon obtained by making noise with the wish-granting *p^hantsut* ‘plate’.

- 7307 (5) a. *[icq^ha p^hantsut nu] ta-zmbri nuu-nu*
 the.aforementioned plate DEM AOR:3→3'-make.noise SENS-be
 7308 ‘He made noise with the (magical wish-granting) plate (by hitting on
 7309 it). (2003 tWxtsa, 134)
- 7310 b. *[wu-mu c^ho ndzi-ky-ndza ky-ts^hi*
 3SG.POSS-mother COMIT 3DU.POSS-OBJ:PCP-eat OBJ:PCP-drink
 7311 *kui-dwi~dyn zo nu] ta-zmbri ny,*
 SBJ:PCP-EMPH~be.many DEM AOR:3→3'-make.noise ADD
 7312 ‘He (made appear) a lot of food and drink for him and his mother by
 7313 making noise (with the wish-granting plate).’ (2003 tWxtsa, 135)

7314 8.1.4 Sole argument of predicates of natural forces

7315 While some verbs referring to natural forces are intransitive (*mnu* ‘shake’ (as an
 7316 earthquake), §19.7.1), most are morphologically transitive auxiliary verbs (mainly
 7317 *lvt* ‘throw’, *þzu* ‘make’, *ta* ‘put’ and *rku* ‘put in’), used in collocation with a noun
 7318 in absolutive form, as in (6) and (7).

7319 The presence of the progressive *asu-* prefix in (6) and of the C-type Aorist
 7320 *ta-* preverb (§15.1.1.1) in (7) show that these verbs are morphologically transitive
 7321 (§14.3.1). The noun in these collocations is also relativized like a direct object
 7322 (§23.5.4).

7323 (6) *tua-muu juu-ysuu-lyt*
 INDEF.POSS-sky SENS-PROG-release
 7324 ‘It is raining.’ (heard in context)

7325 (7) *claz zo c^hui-mda c^ungui tce tce qale*
 IDPH(I):suddenly EMPH IPFV-be.the.time before LNK LNK wind
 7326 *ta-βzu tce tce c^hui-tsaβ ju tce,*
 AOR:3→3'-make LNK LNK IPFV-cause.to.fall be:FACT LNK
 7327 ‘When there is wind suddenly before (the barley or) is fully ripe, it
 7328 presses them (on the ground, and they cannot grow any more).’
 7329 (25-cWXCWz, 42)

7330 However, these constructions have intransitive-like properties: no ergatively
 7331 marked argument can occur, they are in dental infinitive rather than bare intransitive
 7332 form when used with phasal complement-taking verbs (see 186, §16.2.3 and
 7333 §24.2.2.1), and they are relativized like intransitive subjects (§23.5.3.4).

7334 8.1.5 Semi-object

7335 Some morphologically intransitive verbs in Japhug can take a second absolutive
 7336 argument (§14.2.3, Jacques 2016: 4–5, Jacques 2016a: 224). The verb *rga* ‘like’ is
 7337 such an example; in (9) the intransitive subject *pax ra* ‘pigs’ and *nuya* ‘cow’ are
 7338 in absolutive form, with 3PL indexation on the verb for the first. The second argument
 7339 *cirngo* ‘Anisodus tanguticus’ is topicalized. In (9), the subject is topicalized,
 7340 and the second argument *nu* ‘that one’ appears just before the verb, in absolutive
 7341 form (in this particular case, the 1SG indexation suffix merges with the verb stem
 7342 in the Kamnyu dialect, §3.3.1.3).² This second argument is called *semi-object*.

7343 (8) *cirngo nunaŋ, pax ra my-rga-nu* *ri, nuya wuma*
 Anisodus.tanguticus DEM pig PL NEG-like:FACT-PL LNK cow really
 7344 *zo rga.*
 EMPH like:FACT
 7345 ‘The Anisodus tanguticus, pigs don’t like it, but cows do.’ (16-CWrNgo, 9)

²The semi-transitive *rga* ‘like’, though it can take an overt object as in (9), tends to be used more often with complement clauses or left-dislocated objects, the applicative *nurga* ‘like’ being preferred with definite objects, §17.4.1.

- 7346 (9) *ažo bo nuu my-rga-a*
 1SG TOP.ADVERS DEM NEG-like-1SG
 7347 ‘But as for me, I don’t like it.’

7348 Other verbs taking semi-objects include *tso* ‘understand’ (10), *sṛyo* ‘listen’, *rmi*
 7349 ‘be called’.

- 7350 (10) *najrzonj u-juu-tui-tso?*
 interior.decoration QU-SENS-2-understand
 7351 ‘Do you understand (the word) ‘interior decoration’?’ (12-BzaNsa, 91)

7352 Semi-objects are relativized (§23.5.4.1) either with object participles in *kṛ-* (§16.1.2.4)
 7353 or with finite relative clauses (§23.2.2). Semi-objects are also found in some triac-
 7354 tantial verbs. In particular, the theme of secundative verbs is a type of semi-object
 7355 (§8.1.6).

7356 8.1.6 Theme

7357 There are both secundative and indirective ditransitive verbs in Japhug (§14.4).
 7358 In the case of indirective verbs, the theme is the object, while the recipient being
 7359 marked with an oblique case, as in example (11) with the verb *k^ho* ‘give, pass over’.
 7360 With this type of verbs, the theme is relativized in exactly the same way as the
 7361 object of a monotransitive verb (§14.4.1) and is indexed on the verb.

- 7362 (11) *uu-mu u-cki tytṣu nuu pñ-k^ho.*
 3SG.POSS-mother 3SG.POSS-DAT lamp DEM IFR-give
 7363 ‘He gave the lamp to his mother.’ (140511 alading-zh, 167)

7364 With secundative verbs, the recipient is the object and appears in absolute
 7365 form, with object indexation. The theme of these verbs is also in the absolute,
 7366 as *a-me* ‘my daughter’ in (12).

- 7367 (12) *a-me ta-mbi ra*
 1SG.POSS-daughter 1→2-give:FACT be.needed:FACT
 7368 ‘I will give you my daughter.’ (28-smAnmi, 267)

7369 The theme of secundative verbs cannot be indexed by the verb morphology.
 7370 In (13), the theme is the numeral *bnuz* ‘two’, but dual indexation on *nu-ta-mbi* ‘I
 7371 gave X to you’ is not possible, as the form *nu-ta-mbi-ndzi* (AOR-1→2-give-DU) can
 7372 only mean ‘I gave X to both of you’, the number referring to the recipient and
 7373 not the theme (§14.4.2).

- 7374 (13) *ny-ta-mbi ma bnuz nur-ta-mbi ri, nyzo c^hy-tui-cyyz*
 NEG-1→2-give:FACT LNK two AOR-1→2-give LNK 2SG IFR-2-give.back
 7375 *cti tce*
 be.AFF:FACT LNK
 7376 ‘I won’t give her (my youngest daughter) to you, as I gave you two (of my
 7377 daughters), and you sent them back.’ (2002 qaCpa, 56)

7378 The theme of secundative verb is however relativized like an object (see §16.1.2.4,
 7379 §23.5.4.2), and it can be considered as a sub-type of semi-object (§8.1.5).

7380 8.1.7 Essive

7381 Essive noun phrases are not arguments of the sentence, but are used to indicate
 7382 ‘the property of fulfilling the role of an N’ (Creissels 2014: 606; Jacques 2016a:
 7383 225).

7384 In Japhug, bare noun phrases without any case marker can be interpreted as
 7385 essive adjuncts, such as *ny-rzaβ* ‘your wife’ in (14) and *ny-kumtc^huu* ‘your toy’
 7386 (15). These adjuncts are neither recipients (in both examples the recipient is 2SG,
 7387 encoded as object of the ditransitive verb *mbi* ‘give’, §14.4.2) nor themes (in 14 the
 7388 theme is *ji-me* ‘our daughter’, and it serves as object of the indirective *k^ho* ‘give’,
 7389 §14.4.1; in 15 the theme is non-overt).

- 7390 (14) *ji-me nua ny-rzaβ pua-k^ho-tci je, pua-ta-mbi*
 1PL.POSS-daughter DEM 2SG.POSS-wife IPFV-give-1DU SFP IPFV-1→2-give
 7391 *je to-ti*
 SFP IFR-say
 7392 ‘He said: ‘We will give you our daughter in marriage.’ (150831 laoshu
 7393 jianv-zh, 58)
- 7394 (15) *ny-kumtc^huu pua-ta-mbi*
 2SG.POSS-toy IPFV-1→2-give
 7395 ‘I give it to you as a toy.’ (28-kWpAz, 180)

7396 Since essive adjuncts are formally indistinguishable from absolute arguments
 7397 such as objects and intransitive subjects, some sentences may appear to be am-
 7398 biguous. In (16), the noun *turme* ‘person’ could be interpreted as the subject, and
 7399 the phrase *kuki stu kui-xtci ki* as a topic.

- 7400 (16) *kuki stu kui-xtci ki turme pur-pe tce*
 DEM.PROX most SBJ:PCP-be.small DEM.PROX person SENS-be.good LNK
 7401 ‘The smallest one is very nice as a person.’ (31-deluge, 124)

That *turme* here is not the subject can be seen if one chooses a first or second person form: in (17), the noun *turme* is still present despite 2SG indexation on the verb. This piece of evidence demonstrates that the analysis as essive adjunct is the only possible one.

- (17) *nvzo turme wuma juu-tui-pe*
 2SG person really SENS-2-be.good
 ‘You are very nice as a person.’ (elicited)

It is common to have a related word as essive and as the subject or object which it refers to. In (18), for instance, the inalienably possessed noun *tu-yli* ‘dung’ occurs as both intransitive subject of the verb *pe* ‘be good’ (with 3SG possessive prefix) and as essive adjunct, in the latter in the specialized meaning ‘fertilizer’. Note that the essive adjunct is closer to the verb than the oblique phrase in *uu-taꝝ* (§22.1.1.1).

- (18) *ts^hyt nuu yuu uu-yli nuanuu ty-ryku uu-taꝝ*
 goat DEM GEN 3SG.POSS-manure DEM INDEF.POSS-crops 3SG.POSS-on
tuu-yli wuma zo pe.
 INDEF.POSS-manure really EMPH be.good:FACT
 ‘Goat manure is very good as a fertilizer for the crops.’ (05-qazO, 32)

In (19), the noun *mbro* ‘horse’ occurs both in the object of *rku* ‘put in’ (meaning here ‘include the dowry’) and in the essive adjunct *a-mbro* ‘as a horse (for me)’.

- (19) *mbro tuu-skyt kuu-tso ci, a-mbro*
 horse c.POSS-speech SBJ:PCP-understand INDEF 1SG.POSS-horse
ty-rku-nuu ra
 IMP-put.in-PL be.needed:FACT
 ‘Give me a horse who understands human speech as my horse.’ (2003
 kandzWsqhaj, 49)

The essive adjunct can be either closer to the verb than the core argument it refers to, as in (112), (18) and (19) above, or further away as in (20), where the intransitive subject of *mx-ra* ‘is not needed’, *rŋul* ‘silver’, occurs between the verb and the essive *uu-p^huu* ‘as its price’.

- (20) *azuy uu-p^huu rŋul mx-ra,*
 1SG:GEN 3SG.POSS-price silver NEG-be.needed:FACT
 ‘I don’t want money as the price (for these clothes).’ (140506 shizi he
 huichang de bailingniao-zh, 241)

8 Postpositions and relator nouns

7430 With the monotransitive verb *p^hut* ‘cut, pluck’, an essive adjunct can be used
 7431 to express the purpose of the action as in (21).

- 7432 (21) *tsuku kui paŋndza pui-nui-p^hut-nui pui-ŋu ri*,
 some ERG hogwash IPFV-AUTO-pluck-PL SENS-be LNK
 7433 ‘Some people cut it (the Sambucus) as hogwash.’ (12-ndZiNgri, 30-31)

7434 This essive phrase sometimes occurs with the noun *wi-spa* ‘material’ with this
 7435 verb as in (22), a construction that is in the process of grammaticalizing into a
 7436 purposive construction when used with a participial clause (§24.4.2.2).

- 7437 (22) *zyy̥mbu wi-spa pui-nui-p^hut-nui ŋgryl*
 broom 3SG.POSS-material IPFV-AUTO-cut-PL be.usually.the.case:FACT
 7438 ‘They cut it to make brooms. (=as a material for brooms.)’ (140505 sWjno,
 7439 22)

7440 Some verbs, like *syrtsi* ‘consider as’ (§17.2.8), have an essive argument (rather
 7441 than adjunct), which is not indexed on the verb and receive no case marking, as
 7442 shown by (23), where the essive argument is *a-tcui* ‘my son’.

- 7443 (23) *azo a-tcui tu-ta-nui-syrtsi ŋu*
 1SG 1SG.POSS-son IPFV-1→2-AUTO-consider.as be:FACT
 7444 ‘I consider you as my son.’ (elicited)

7445 The transitive verb *wum* ‘gather’ can also select an essive argument different
 7446 from the object when used in the meaning ‘take as a student’, as in (24).³ In this
 7447 example the object is 1SG, and the essive is the noun *ny-slama*, with a possessive
 7448 prefix coreferent with the subject. The verb *wum* in this meaning requires the
 7449 orientation EASTWARDS in its centripetal function (see example 92, §15.1.4.3).

- 7450 (24) *wortchi zo azo ny-slama ku-kui-wum-a*
 please EMPH 1SG 2SG.POSS-student IPFV-2→1-gather-1SG
 7451 ‘Please take me as your student.’ (150907 laoshandaoshi-zh, 40)

7452 Verb ellipsis may explain the presence of essive noun phrases with verbs that
 7453 are not usually used with adjuncts of this type. For instance, in (25), the nouns
 7454 *pyrtciu* ‘bird’ and *tr-mdzu* ‘thorn’ are not objects (there 1SG object indexation on

³This expression is similar to Chinese 收……为徒 <shōu ... wéitú> ‘take as a disciple’, where 收 *shōu* has the same meaning as *wum* ‘gather’, and where the essive is overtly marked by 为 *wéi*.

7455 both *pú-wy-su-sat-a* and *t^hú-wy-su-sat-a*) and are analyzable as essive adjuncts
 7456 ‘me, as a bird/thorn’, ‘while I was a bird/thorn’. ⁴

- 7457 (25) *a-pi* *kua nura pui-fse tce, pyxtcau ri*
 1SG.POSS-elder.sibling ERG DEM:PL PST.IPFV-be.like LNK bird also
 7458 *pú-wy-su-sat-a, ty-mdzu ri t^hú-wy-su-sat-a*
 AOR-INV-CAUS-kill-1SG INDEF.POSS-thorn also AOR-INV-CAUS-kill-1SG
 7459 ‘Your elder sister was like that, she had me killed (while I was a) bird, and
 7460 had also me killed (while I was a) thorn.’ (2005 Kunbzang, 403-404)

7461 The presence of these adjuncts in this particular context is probably due to
 7462 the ellipsis of *tx-sci-a* ‘I was born’, an intransitive verb which takes essive noun
 7463 phrases with the meaning ‘be reborn as, be reincarnated as’ as in (26).

- 7464 (26) *nua u-q^hu tce pyxtcau tx-sci-a, nua u-q^hu tce*
 DEM 3SG.POSS-after LNK bird AOR-be.born-1SG DEM 3SG.POSS-after LNK
 7465 *tx-mdzu ty-sci-a q^he*
 INDEF.POSS-thorn AOR-be.born-1SG LNK
 7466 ‘After that I was reborn as a bird, and after that I was reborn as a thorn.’
 7467 (2003 Kunbzang, 454-455)

7468 8.1.8 Goal

7469 Motion verbs (*qe* ‘go’, *yi* ‘come’, *tok* ‘come out’ etc), manipulation verbs (*yut*
 7470 ‘bring’, *tsum* ‘take away’ etc) and some perception verbs (like *ru* ‘look at’) have
 7471 arguments referring to the location towards which the action is directed. These
 7472 arguments are not indexed in the verb morphology (in particular, motion verbs
 7473 are intransitive, see §14.2.4). They can be marked with locative postpositions
 7474 (§8.2.4.1) or dative (§8.3.1), but also occur in absolute form, as *turme-k^ha* ‘other
 7475 people’s house’ in (27).

- 7476 (27) *tce nua-myrzaβ q^he tce turme-k^ha jy-ari cti q^he*
 LNK AOR-marry LNK LNK people-house AOR-go[II] be.AFF:FACT LNK
 7477 ‘She married and went to (live at) other people’s (her in laws’) house.’
 7478 (14-siblings, 10)

7479 Goals can be relativized (§23.5.5) using oblique participial relatives (§16.1.3.5)
 7480 or finite relatives (§23.5.1), but not object participial relatives except in a very
 7481 restricted context (§23.5.2), unlike most absolute arguments.

⁴This example comes from a story where the main character was repeatedly killed by her sister, and reborn several times, first as a bird, and then as a thorn, as described in (25), from another version of the same story.

7482 8.1.9 Location

7483 In addition to goals, absolute noun phrases expressing a static location are
 7484 found in Japhug, in particular with the verb *rÿzi* ‘stay’ as in (28). Locative post-
 7485 positions can also occur, but are optional (§8.2.4.1).

- 7486 (28) *tce pjui-sy-suuxcat-a pui-ŋu tce, rqaco pur-rÿzi-a,*
 LNK IPFV-ANTIPASS-teach-ց PST.IPFV-be LNK TOPO PST.IPFV-stay-1SG
 7487 *tsʰuβdun pui-rÿzi-a.*

TOPO PST.IPFV-stay-1SG

7488 ‘When I was teaching, I lived in Rqakyo and in Tshobdun.’ (150819
 7489 kumpGa, 2)

7490 Absolutive locative phrases are also found with some transitive verbs, as *nui-*
 7491 *mtʰyy* ‘their waist’ with *rtyβ* ‘attach’ in (29).

- 7492 (29) *turme ra kuu nui-mtʰyy pui-rtyβ-nui.*
 people PL ERG 3PL.POSS-waist IPFV-attach-PL

7493 ‘People attach it (badger skin) around their waist (as a remedy for
 7494 rheumatism).’ (27-spjaNkW, 135)

7495 Oblique participial relatives (§16.1.3.5, §23.5.5.1) or finite relatives (§23.5.5.1) are
 7496 used to relativize these absolute locative phrases.

7497 8.2 Postpositions

7498 Postposition are invariable words which necessarily follow a noun phrase, and
 7499 specify the syntactic function of that noun phrase, be it core argument or adjunct.
 7500 They cannot be used on their own, and at the very least require a demonstrative
 7501 pronoun such as *nui* (§6.9.1).

7502 Although their uses have commonalities with relator nouns (§8.3), they differ
 7503 from those in lacking a possessive prefix. Postposition stacking is rare; only two
 7504 cases exist: the sequence of locative postpositions *tqu zuu* and *tce* (§8.2.4.1) and also
 7505 the case of genitive postpositional phrases used in the meaning ‘the one from/
 7506 of ...’ (with an elided head noun), as in (30), where the genitive *yuu* is followed by
 7507 the comitative (§8.2.5).

- 7508 (30) *tce pxjka yuu cʰo wuma zo naxtcuy.*
 LNK pumpkin GEN COMIT really EMPH be.similar:FACT
 7509 ‘Its (little thorn-like things) are like those of the pumpkin.’

7510 **8.2.1 Independent words vs. clitics**

7511 Since other Gyalrongologists, in particular Sun (1998; 2014a), treat the postposi-
 7512 tions in related languages as clitics rather than as independent words as is done
 7513 in the present work, a justification of the present analysis is necessary.

7514 In Japhug, the postpositions *kuu* ‘ergative’ (§8.2.2) and *yuu* ‘genitive’ (§8.2.3) do
 7515 have some clitic-like characteristics: they cannot be used without a preceding
 7516 noun phrase (or a subordinate clause, §25.1.1), are unstressed, and in the case of
 7517 the genitive have special irregular forms with pronouns (§6.3).

7518 However, a pause can occur between these postpositions (31) and the noun
 7519 phrase they follow. For instance, in example (31), a two second pause (with an
 7520 inspiration) is found between the phrase *nunja ra* and the following ergative *kuu*.

- 7521 (31) *tce turtsi nuu pjáu-wy-βzu tce, nunja ra, kuu*
 LNK cow.food DEM IPFV-INV-make LNK COW PL ERG
 7522 *ny-mum-nuu cʰo wuma zo yu-w-cui-fka-nuu*
 TROP-be.tasty:FACT-PL COMIT really EMPH INV-CAUS-be.satiated:FACT-PL
 7523 ‘They make cow food with flour, the cows find it tasty, and it satisfies
 7524 their hunger.’ (140513 tWrtsi, 15)

7525 A filler (§10.3) can even be inserted between the noun phrase and the following
 7526 ergative, as in (32).

- 7527 (32) *tcendyre ieqʰa <xifangping> nuu, nykinuu, kuu*
 LNK the.aforementioned ANTHR DEM FILLER ERG
 7528 *'ui-wa yuu nuunu tʰuci ui-tutṣay ci*
 3SG.POSS-father GEN DEM something 3SG.POSS-justice INDEF
 7529 *a-pui-tu ra' ntsuu jui-suisym pji-ηu.*
 IRR-IPFV-exist be.needed:FACT always SENS-think[III] IFR-be
 7530 ‘Xi Fangping wanted to obtain justice for his father.’ (150909
 7531 xifangping-zh, 30)

7532 Such cases are by no means exceptional; at least 54+35 examples of ergative
 7533 and genitive preceded by a pause are attested in the corpus (they can be found
 7534 by searching *kuu* or *yuu* preceded by a comma). Most of these cases are found
 7535 in sentences where the speaker hesitates, and are especially common in texts
 7536 translated from Chinese.

7537 The same is true of all postpositions studied in this section. Examples of pause
 7538 between the noun phrase and the following postposition can be found for most
 7539 of them, for instance (33) for the locative *zuu* (§8.2.4.1).

- 7540 (33) *<bageda> ky-ti numutcu, zuu, nykinuu,*
 TOPO OBJ:PCP-say DEM:LOC LOC FILLER
 7541 ‘In the (place) called Bagdad...’ (140515 facaimeng-zh, 2)

7542 8.2.2 Ergative

7543 The ergative *kuu*, like genitive *yuu*, is borrowed from Tibetan (Jacques 2016b) and
 7544 shares with the Tibetan ergative the functions of marking transitive subject, in-
 7545 strument and cause. It has however a series of specific functions not found in
 7546 Tibetic languages, such as that of comparee (§8.2.2.7), distributive (§8.2.2.8), and
 7547 oblique argument (§8.2.2.10) marker. It is homophonous with the orientation ad-
 7548 verb *kuu* EASTWARDS (§22.2.6).

7549 Although postpositional phrases in *kuu* have a different syntactic status depen-
 7550 ding on the various sub-functions of this marker (as can be shown with tests like
 7551 relativization), *kuu* is glossed as ERG in all cases.

7552 The postposition *kuu* does not appear in combination with the additive focus
 7553 marker *kuny* ‘also, even’ (§9.1.6.1), regardless of its function.

7554 8.2.2.1 Transitive subject

7555 The core function of *kuu* is marking the subject of morphologically transitive
 7556 verbs. Ergative is obligatory on third person transitive subjects as in (34), and
 7557 is agrammatical on objects and intransitive subjects, except in the case of long
 7558 distance ergative (§8.2.2.2) and some semi-transitive verbs (§8.2.2.3). Apparent
 7559 counterexamples are speech errors (§8.1.1).

- 7560 (34) *tceri u-tcuu nuu kuu nuu pjy-suχsyl*
 LNK 3SG.POSS-SON DEM ERG DEM IFR-recognized
 7561 ‘But the son realized it (that she was a râkshasi).’ (28-smAnmi, 21)

7562 Transitive subjects in the ergative most often precede the object as in (34), but
 7563 can also follow it as in (35), an example illustrating a third person inanimate
 7564 (*tusqar kuu* ‘tsampa’) acting on first/second person (§14.3.2.1).

- 7565 (35) *nyzo tusqar kuu nyki nuu t^hu-túu-wy-stu cti tce,*
 2SG tsampa ERG DEM.MEDIAL DEM AOR-2-INV-do.like be.AFF:FACT LNK
 7566 ‘Tsampa made you the (way you are now) = You grew that big by eating
 7567 tsampa.’ (2011-07-tWsqr, 4)

7568 While ergative is obligatory on third persons, it is optional on first and second
 7569 person pronouns, as shown by example (36) where *azo* ‘1SG’ is in absolute form
 7570 with the transitive verb *mjo* ‘prepare’.

- 7571 (36) *maš ny, azo t̪-mjo-t-a, kuči kuu tci*
 not.be:FACT SFP 1SG AOR-prepare-PST:TR-1SG DEM.PROX ERG also
 7572 *mx-βze rca!*
 NEG-make[III]:FACT SFP
 7573 ‘No, it is I who prepared (our lunch), she does not do it.’ (Answer to the
 7574 question ‘Did she made (your lunch?’), conversation 140510)

7575 Using the ergative on a first or second person pronoun in transitive subject
 7576 function is however never impossible, as in (37), and more common in the case
 7577 of contrastive focus (§22.1.2.3).

- 7578 (37) *nur kuř-fse tce tyscoz užo kuu jui-sur-yut, azo kuu*
 DEM SBJ:PCP-be.like LNK letter 3SG ERG IPFV:WEST-CAUS-bring 1SG ERG
 7579 *ku-sui-tsum-a tce,*
 IPFV:EAST-CAUS-take.away-1SG LNK
 7580 ‘And like that, she sent me letters (by mail), and I sent her letters.’
 7581 (12-BzaNsa, 26)

7582 Transitive subjects are relativized using subject *ku-* participial relative clauses,
 7583 the participle taking a possessive prefix coreferent with the object (§16.1.1.1).

7584 8.2.2.2 Long distance ergative

7585 Postpositional phrases in *ku* referring to the subject of a transitive verb can be
 7586 stranded from their verb by another clause with an intransitive verb.

7587 In (38), for instance, the clause *nū ma u-kypa pj̪-me q̪e* ‘she had no other
 7588 way’ separates the subject *t̪ycime nū kuu* ‘the princess’ from the main verb *to-ti*
 7589 ‘she said’; note the presence of a pause and of the filler *nykinuu* after the transitive
 7590 subject. The transitive subject here also happens to be coreferent with the
 7591 possessor of *u-kypa* ‘her method, her way’ in the standing clause, resulting in a
 7592 surface case mismatch.

- 7593 (38) *tcendyre tycime nur ku, nykinuu, nū ma u-kypa*
 LNK young.lady DEM ERG FILLER DEM apart.from 3SG.POSS-method
 7594 *pj̪-me q̪e jyy jyy jyy*
 IPFV.IFR-not.exist LNK be.possible:FACT be.possible:FACT be.possible:FACT

- 7595 *to-ti nuu-ŋu.*
 IFR-say SENS-be
 7596 ‘The young lady had no other way but to say “yes, yes, yes”.’ (140428 mu
 7597 e guniang-zh, 92)

7598 Similarly in (39), the minimal clause *jo-yi* ‘he came’ consisting of a single verb
 7599 occurs between the subject *içq^ha rgxtpu nuu kuu* ‘the old man’ and the rest of the
 7600 main clause *t_yndzi nunuu jo-ts^hi* ‘he stopped the demon’.

- 7601 (39) *icq^ha rgxtpu nuu kuu, jo-yi tce, nyki, t_yndzi*
 the.mentioned old.man DEM ERG IFR-come LNK FILLER demon
 7602 *nunuu jo-ts^hi*
 DEM IFR-block
 7603 ‘The old man came and stopped the demon.’ (140512 fushang he
 7604 yaomo1-zh, 62)

7605 Here the intransitive subject of *jo-yi* ‘he came’ and the transitive subject of
 7606 *jo-ts^hi* ‘he blocked him’ happen to be coreferent. If analyzed superficially, (39)
 7607 could seem to be an example of ergative appearing on an intransitive subject.
 7608 In isolation, however, without context, a clause such as *t_yrgxtpu nuu kuu jo-yi* is
 7609 not considered to be correct by native speakers, showing that it is preferable to
 7610 analyze *jo-yi* as an incision in this context rather than forming a constituent with
 7611 the preceding postpositional phrase in *kuu*.

7612 8.2.2.3 Intransitive subject

7613 Genuine examples of intransitive subjects with ergative appear to be nevertheless
 7614 attested at least with some semi-transitive verbs like *tso* ‘know, understand’
 7615 as in (40). It is optional and much less common than the absolutive form.

- 7616 (40) *cui kuu tso ma*
 who ERG understand:FACT LNK
 7617 ‘Who would know.’ (150909 xiaocui-zh, 65)

7618 Ergative marking on the subject of reflexive verbs (which are morphologically
 7619 intransitive, §18.3) is also attested for marking emphasis, with the same pronoun
 7620 preceding and following the ergative (for instance *tuzo kuu tuzo* in example 15,
 7621 §6.2.1).

7622 8.2.2.4 Instrumental

7623 In addition to marking the transitive subject, the postposition *kuu* occurs on in-
 7624 struments, as in (41). It is possible to find examples with postpositional phrases
 7625 in *kuu*, one corresponding to the subject and the other one to the instrument, as
 7626 in (42). No good examples of instruments in *kuu* are found with an intransitive
 7627 main verb in the corpus (only manner or causal adjuncts are found, §8.2.2.5).

- 7628 (41) *u-puu nuu u-lu kuu c^huu-suu-χse puu-ηu.*
 3SG.POSS-young DEM 3SG.POSS-milk ERG IPFV-CAUS-feed[III] SENS-be
 7629 '(The whale) feeds its young with milk.' (160703 jingyu, 14)

- 7630 (42) *rjylpu kuu nuunu kuu u-βri a-puu-suu-χtei ndyre,*
 king ERG DEM ERG 3SG.POSS-body IRR-PFV-CAUS-wash LNK
 7631 *myzui ny-sy-scit t^haŋ ny!*
 even.more TROP-PROP-be.happy:FACT HYPOTH SFP
 7632 'If the king washes his body with this, he will find it even nicer.' (140514
 7633 xizajiang he lifashi-zh, 88-89)

7634 When an instrument in *kuu* occurs in a clause, the main verb generally takes the
 7635 causative prefix as in (41) and (42), as if the instrument were a type of causee – it
 7636 differs from a causee however in that in the case of the latter the postposition *kuu*
 7637 is optional (§8.2.2.6). Causative marking in clauses with instruments is optional,
 7638 and one can find the two constructions with or without the causative marker
 7639 side by side in the same narrative, as shown by examples (43) and (44).

- 7640 (43) *qarts^haz u-ndzi kuu c^huu-βzu-nuu tce, nuu stu kuu-zru.*
 deer 3SG.POSS-hide ERG IPFV-do-PL LNK DEM most SBJ:PCP-precious
 7641 'They make (shoes) with deer hide, it is the most precious (type of skin).'
 7642 '(30 mboR, 48)
- 7643 (44) *qarts^haz u-ndzi ʂja kuu zo t^huu-k^y-sui-βzu*
 deer 3SG.POSS-hide entirely ERG EMPH AOR-OBJ:PCP-CAUS-do
 7644 '(It is) entirely made of deer hide.' (30 mboR, 53)

7645 The instrument is mainly a concrete object, but can also refer to an entire
 7646 action, as in (45) where the anaphoric *nuu* 'that' refers to the actions described in
 7647 the previous clauses.

8 Postpositions and relator nouns

- 7648 (45) *ty-tceu nuu kuu spikuku zo si z-lu-p^but tce, nuu*
 INDEF.POSS-son DEM ERG every.day EMPH tree TRAL-IPFV-fell LNK DEM
 7649 *pua-ntsy-e-ndzi tce, nuu kuu ndzi-xtu c^buu-suu-χsu-ndzi*
 IPFV-sell-DU LNK DEM ERG 3DU.POSS-belly IPFV-CAUS-feed-DU
 7650 *pua-ηu pua-ηu,*
 PST.IPFV-be SENS-be
 7651 ‘The son went every day to fell trees, they sold (the wood), and they fed
 7652 their bellies this way.’ (2003tWxtsa, 2-3)

7653 Instruments differ from transitive subjects in that they are relativized using
 7654 oblique participles in *syr(z)-* (§16.1.3) rather than subject participles.

7655 8.2.2.5 Manner and cause

7656 Postpositional phrases in *kuu* can also describe the manner in which an action
 7657 takes place, or its cause. Manner adjuncts in *kuu* are generally formed with ab-
 7658 stract nouns (§16.4.2) as *ty-mqe* ‘verbal fight’ and *ty-ndut* ‘dispute’ in (46) and
 7659 *tyŋym* ‘pain’ in (47). Unlike instruments, manner adjuncts do not trigger the ad-
 7660 dition of a causative prefix on the main verb, and are fully compatible with in-
 7661 transitive verbs.

- 7662 (46) *kumpya c^bo k^buna ni li ty-mqe*
 chicken COMIT dog du again INDEF.POSS-verbal.fight
 7663 *ty-ndut kuu jo-yi-ndzi tce,*
 INDEF.POSS-dispute ERG IFR-come-DU LNK
 7664 ‘The chicken and the dog came fighting and arguing (with each other).’
 7665 (150826 shier shengxiao-zh, 120)

- 7666 (47) *tyŋym kuu pjuu-si pjuu-ra.*
 pain ERG IPFV-die SENS-be.needed
 7667 ‘(The animal that is devoured alive by the lions) dies in pain.’ (20-sWNgi,
 7668 48)

7669 Causal adjuncts, like manner adjuncts, also take the postposition *kuu* without
 7670 causative form on the verb, as in (48). The inalienably possessed noun *w-ndza* ‘its
 7671 cause’ in particular is often used with the ergative to specify a cause (49).

- 7672 (48) *k^ba w-brum nuu kuu tce tce pjuu-yycu*
 house 3SG.POSS-shade DEM ERG LNK LNK SENS-be.cool
 7673 ‘Due to the shade of the buildings, (this road) is not exposed to the heat of
 7674 the sun.’ (conversation 2014-05-10)

- 7675 (49) *qambalaula nuu, nuu uu-ndza kuu t^ha uuβry-si ma*
 butterfly DEM DEM 3SG.POSS-cause ERG later RH.Q-die:FACT SFP
 7676 ‘The butterfly might die because of that.’ (150818 muzhi guniang, 199)

7677 Various subordinate clauses with finite or non-finite verbs are also made with
 7678 the postposition *kuu* (see §25.5 and §25.6.1.2 for instance).

7679 **8.2.2.6 Causee**

7680 Causative verbs in *sui(y)-/z-* derived from transitive verbs have three arguments:
 7681 causer, causee and object (§14.4.3, §17.2.4.2). The causer is treated as the transitive
 7682 subject, and is marked with the ergative. The causee can also receive ergative
 7683 marking as *qapri kuu-jas nuu kuu* ‘the black snake’ in (50) and *kuu-wyrum nuu kuu*
 7684 ‘the white one’ (51). The most common word order is to put the causee before the
 7685 object as in (50), but the opposite order is also attested as in (51).

- 7686 (50) *li mdaŋzuy ci to-lyt tce, tcendyre, nyki, qapri*
 again bow one IFR-release LNK LNK filler snake
 7687 *kuu-jas nuu kuu kuu-wyrum nunuu lo-sui-qios tce*
 SBJ:PCP-be.black DEM ERG SBJ:PCP-be.white DEM IFR-CAUS-vomit LNK
 7688 *tce ny-sui-ykylt.*
 LNK IFR-CAUS-detach
 7689 ‘He shot an arrow and caused the black snake to vomit the white one, and
 7690 separated it (from the other one).’ (28-smAnmi, 106)

- 7691 (51) *to-lyt tce tcendyre nunuu qapri kuu-jas nuu,*
 IFR-release LNK LNK DEM snake SBJ:PCP-be.black DEM
 7692 *kuu-wyrum nuu kuu lo-sui-qios tce ny-sui-ta.*
 SBJ:PCP-be.white DEM ERG IFR-CAUS-vomit LNK IFR-CAUS-put
 7693 ‘He shot (an arrow) and caused the white one to vomit the black snake
 7694 and to release it.’ (28-smAnmi, 99)

7695 However, the presence of ergative on the causee is optional, as shown by exam-
 7696 ple (52) where the causee *uu-tci stu kuu-xtei nuu* ‘his youngest son’ is in absolute
 7697 form.

- 7698 (52) *rjyłpu kuu uu-tci stu kuu-xtei nuu c-ko-z-ruru.*
 king ERG 3SG.POSS-son most SBJ:PCP-be.small DEM TRAL-IFR-CAUS-guard
 7699 ‘The king had his youngest son (go and) guard (the tree).’ (140507
 7700 jinniao-zh, 39)

When the object is third person, and the causee first or second, the causee is obligatorily indexed, as in (53a) (see §17.2.4.2 for more examples), resulting in a verb form that is identical with that when both causer and causee are third person, and the object is first or second person as in (53b). With such ambiguous verb forms, the presence of the ergative postposition on the causee as *a-tuu* *kuu* ‘my son’ in (53b) is a way to disambiguate from the interpretation of the noun as object as in (53a).

- (53) a. *wizo kuu a-tuu pú-wy-sui-mto-a*
 3SG ERG 1SG.POSS-son AOR-INV-CAUS-see-1SG
 ‘He let me see my son.’ (elicitation)
- b. *wizo kuu a-tuu kuu pú-wy-sui-mto-a*
 3SG ERG 1SG.POSS-son ERG AOR-INV-CAUS-see-1SG
 ‘He let my son see me.’ (elicitation)

No minimal pair similar to (53a) and 53b), where the ergative on the causee has a disambiguating function, is attested in the corpus.

8.2.2.7 Comparee marker

In the comparative construction (§26.2), in addition to the standard markers (such as *syz* and its variants, see §8.2.7), the postposition *kuu* can appear on the comparee, although the comparee is syntactically an intransitive subject (indexed on the stative adjectival predicate).

The comparee with *kuu* can either precede (54) or follow the standard, but most often this marker appears when no overt standard is present as in (55). In all of these examples, including the last one, the marker *kuu* is optional.

- (54) *mahi nunuu kuu azo syz c^ha*
 water.buffalo DEM ERG 1SG COMP can:FACT
 ‘The water buffalo is stronger than me.’ (150831 laoshu jianv-zh, 59)
- (55) *ndzi-ts^huya nura wuma naxtcury. tceri turgilanlaŋ nuu kuu xtci.*
 2DU.POSS-form DEM:PL really be.similar:FACT but fir.cone DEM ERG
 be.small:FACT
 ‘Their shape is similar, but the fir cone is smaller.’ (08-tWrgi, 80)

See Jacques (2016b) for a historical hypothesis explaining how the ergative marker came to be used to mark the comparee.

7729 8.2.2.8 Distributive

7730 The postposition *kua*, when occurring with a counted noun designating a quantity,
 7731 can be used to focus on the distributive meaning ('for one X', 'per'). It occurs in
 7732 constructions with intransitive verbs where no agent or instrument is present,
 7733 but exclusively to express the price of the quantity designated, as in (56) (see
 7734 additional examples in Jacques 2016b: 5–6). It cannot be used with time counted
 7735 nouns.

- 7736 (56) *tua-turpa kua sqi jamar tua-ra.*
 one-pound ERG ten about SENS-be.needed
 7737 'You need ten (yuans) per pound (of Angelica).' (17 ndZWnW, 22)

7738 As argued in Jacques (2016b: 23), this construction results from the elision
 7739 of a verb such as *syndu* 'exchange', which can take as instrument (§8.2.2.4) the
 7740 counted noun expressing a quantity, as in (57).

- 7741 (57) *tua-turpa kua yurza jamar tua-wy-syndu tua-k^hua*
 one-pound ERG hundred about IPFV-INV-exchange SENS-be.possible
 7742 'One can exchange (sell) one pound for a hundred (yuans).' (elicited)

7743 8.2.2.9 Partitive

7744 The intransitive verb *mts^hyt* 'be full' generally has a dummy subject, and selects
 7745 a locative argument and a partitive argument, indicating the material / elements
 7746 that the location is full of. This partitive argument is generally in a absolute
 7747 form, as in (58), but we also find examples with the ergative, as in (59).⁵

- 7748 (58) *tṣapa t^hamtcxt, nuu-mbro nuu-jla, nuuja pa^h nuura*
 pen all 3PL.POSS-horse 3PL.POSS-hybrid.yak cow pig DEM:PL
 7749 *jy-mts^hyt.*
 IFR-be.full
 7750 'All the pens had become full of horses, hybrid yak, cows and pigs.'
 7751 (28-qajdoskAt, 131)

⁵Although (59) is translated from Chinese, the original has 下面坐满了观众 <xiàmiàn zuòmǎn le guānzhòng> 'Below, the spectator seats were filled', and there is nothing in the structure of the original sentence that could allow to interpret the ergative as a calque. In addition, Tshendzin confirmed that the ergative is correct here.

- 7752 (59) *wi-pa* *nwtcu rca*, *kui-nympo* *kui pjy-mts^hyt*
 3SG.POSS-down DEM:LOC UNEXP:DEG SBJ:PCP-watch ERG IPFV.IFR-be.full

7753 *zo*
 EMPH

7754 ‘Down (the stage), (the seats) were full of spectators.’ (150822 yan muouxi
 7755 de ren-zh, 55)

7756 Another verb with an optionally ergative partitive argument is the passive
 7757 *amar* ‘be smeared with’ (example 20, §18.1.3).

7758 8.2.2.10 Oblique argument

7759 The transitive verb *k^hyt* ‘do repeatedly’, ‘do for a long time’ and its causative
 7760 form *sui-k^hyt* ‘cause to do repeatedly’, ‘cause to do for a long time’ occur in a
 7761 construction with instrumental-like noun phrases marked with the ergative *kui*,
 7762 indicating the action which is performed repeatedly or done over a long time.
 7763 These noun phrases can include either an action nominal derived from a verb
 7764 with the prefix *tui-* (§16.4) as in (60), or an underived action noun, as in (61) and
 7765 (62).

- 7766 (60) *tui-qios* *kui tó-wy-sui-k^hyt* *zo tce, tce*
 NMLZ:ACTION-vomit ERG IFR-INV-CAUS-do.a.long.time EMPH LNK LNK

7767 *nósmuaz ny tuy numu ló-wy-sui-tcyt*
 only.then LNK poison DEM IFR-INV-CAUS-take.out
 7768 ‘(The medicine) caused (Gesar) to vomit a long time until he expelled the
 7769 poison.’ (Gesar, 266)

- 7770 (61) *ta-ma* *kui ta-k^hyt* *zo*
 INDEF.POSS-work ERG AOR:3→3'-do.a.long.time EMPH
 7771 ‘He did a lot of work.’ (elicited)

7772 Example (62), with the verb *k^hyt* ‘do repeatedly, do a long time’ taking 1SG→3
 7773 indexation (§14.3.2.1), shows that the ergative phrase cannot be analyzed as a
 7774 transitive subject; moreover, the fact that adding the causative in this case would
 7775 imply a real causative interpretation (‘cause X to repeatedly’) also indicates that
 7776 this phrase is not an instrumental adjunct (see §8.2.2.4).

- 7777 (62) *k^hcyl* *kui ty-k^hat-a* *zo*
 conversation ERG AOR-do.a.long.time-1SG EMPH
 7778 ‘I have a long conversation.’ (elicited)

7779 No other verb takes this type of oblique ergative phrase.

7780 **8.2.3 Genitive**

7781 With the exception of particular forms for some pronouns (§6.3), the genitive
 7782 postposition has the invariant form *yuu* in Kamnyu Japhug. Like the ergative *kuu*,
 7783 it is likely borrowed from the Amdo clitic -*yə/-kə* (Haller 2004: 62). It is used in
 7784 possessive contructions, but also expresses beneficiary and recipient.

7785 **8.2.3.1 Possession**

7786 The genitive *yuu* occurs in various type of possessive constructions, including
 7787 genitival noun complements and possessive existential predicates (§22.5.2.1).

7788 Inside the noun phrase, the genitive occurs between possessor and possessum,
 7789 and a possessive prefix is found on the possessum (§5.1.1.2), as in (63).

- 7790 (63) *ri yzrndza yuu u-jwaṣ nuara my-wxti ri,*
 LNK Agastache.rugosa GEN 3SG.POSS-leaf DEM:PL NEG-be.big:FACT LNK
jnaṣ zo qhe,
 be.black:FACT EMPH LNK

7792 ‘The leaves of the *Agastache rugosa* are not large and quite dark in colour.’
 7793 (11-qarGW, 137)

7794 Genitival phrases without possessive prefix on the possessum are rare but do
 7795 exist, in particular when the possessum is a noun borrowed from Chinese and
 7796 non-fully nativized like 国语 <*guoyü*> ‘national language’ in (64).

- 7797 (64) *izo yuu <guoyu> jnu-ŋu tce, nunu kxwifse yuu*
 1PL GEN national.language SENS-be LNK DEM all GEN
ji-rju jnu-ŋu tce,
 1PL.POSS-speech SENS-be LNK
 7799 ‘(Chinese) is our national language, it is the language of all of us.’ (150901
 7800 tshuBdWnskAt, 15-16)

7801 For singular noun possessors, the presence or not of a third person possessive
 7802 prefix *u-* is not always easy to tell from recordings, as due to the external sandhi
 7803 (§4.3), *yuu u-* merges as /*yuu*/ when no pause occurs between the two. In careful
 7804 speech, the third person prefix is clearly audible.

7805 Nominal modifiers can sometimes be marked like possessors, with the genitive
 7806 and/or with a possessive prefix on the following head noun, see §8.2.3.3.

7807 The genitive can also appear between a noun phrase and a relator noun (§8.3),
 7808 and even be followed by focus markers in this position, as in (65).

8 Postpositions and relator nouns

- 7809 (65) *tua-ci kua-wxti yuu kumy ua-rkua ri nuara*
 INDEF.POSS-water SBJ:PCP-be.big GEN also 3SG.POSS-side LOC DEM:PL
 7810 *tu ngryl.*
 exist:FACT be.usually.the.case:FACT
 7811 ‘(Dragonflies) are also found near (large) rivers.’ (26-quspunmbro, 7)

7812 In these constructions, the genitive is always optional, and the prefix on the
 7813 possessum suffices to express possession, as in (66) (see §5.1.1.2).

- 7814 (66) *paxci ua-jwas tsa fse ri nuu syzny artum,*
 apple 3SG.POSS-leaf a.little be.like:FACT LNK DEM COMP be.round:FACT
 7815 ‘(Its leaves) are a little like the leaves of an apple tree, but more round.’
 7816 (09-mi, 15)

7817 When the possessum is elided however, the genitive postposition becomes
 7818 obligatory, as in (67).

- 7819 (67) *ua-ryi nuunu, nyki, <beigua> yuu syz*
 3SG.POSS-seed DEM FILLER pumpkin GEN COMP
 7820 *nuu-jayjui.*
 SENS-be.thick.and.strong
 7821 ‘Its seeds are thicker than those of the pumpkin.’ (16-CWrNgo, 130)

7822 While there are transitive and semi-transitive verbs expressing possession
 7823 (§22.5.2), the most common possessive construction involves an existential verb
 7824 taking the possessum as subject, with the possessor marked by a possessive pre-
 7825 fix on the possessum, and optionally with the genitive, as in (68).

- 7826 (68) *qarts^haz p^hu nuu yuu ua-bruu yyzu*
 deer male DEM GEN 3SG.POSS-horn exist:SENS
 7827 ‘The male deer has horns.’ (27-qartshAz, 32)

7828 This construction is also used for abstract possession, as in (69).

- 7829 (69) *azuy a-βlu tu*
 1SG:GEN 1SG.POSS-trick exist:FACT
 7830 ‘I have an idea.’ (140507 tangguowu-zh, 29)

7831 The causative verbs *yrtu* ‘cause to have’ and *yrmē* ‘cause not to have, destroy’
 7832 derived from *tu* ‘exist’ and *me* ‘not exist’ (§17.3.2.3) select an oblique argument

7833 with the genitive, as in (70). Although this argument could be considered to be
 7834 a type of beneficiary (§5.1.1.4), we observe here stability in case marking of the
 7835 possessor between the base construction and the derived causative one.

- 7836 (70) *wzo kuu maka ky-ntc^hoz my-kuu-yreco kui-fse*
 3SG.POSS ERG at.all INF-use NEG-INF:STAT-be.finished INF:STAT-be.like
 7837 *zo turjua laxtc^ha wzo yuu tu-yy-te-a*
 EMPH wealth thing 3SG.POSS GEN IPFV-CAUS-exist[III]-1SG
 7838 *jy*
 be.possible:FACT
 7839 '(If someone saves me), I will make him have more wealth and riches than
 7840 he can ever use.' (140512 yufu yu mogui-zh, 84)

7841 Not all combinations of existential verbs and genitival phrases are existential
 7842 possessive constructions. For instance, in (71), the second clause could appear to
 7843 contain a possessive construction meaning 'the mouse only has half of it', but
 7844 the context makes it clear that a different interpretation is necessary (§26.2.5).

- 7845 (71) *qamtcuar nuu u-mtc^hi nuunu βzui sszny myzui zo amtcos*
 shrew DEM 3SG.POSS-mouth DEM mouse COMP yet EMPH be.pointy
 7846 *tce nuu βzui yuu u-qiuu kuni me*
 LNK DEM mouse GEN 3SG.POSS-half even not.exist:FACT
 7847 'The shrew's mouth is even sharper than that of the mouse, and (its size)
 7848 is not even half that of the mouse.' (27-spjaNkW, 204-205)

7849 8.2.3.2 Recipient and beneficiary

7850 The genitive can be used to mark the recipient by the indirective verb *k^ho* 'give,
 7851 pass over', as in (72) and (73).

- 7852 (72) *cui zo stu kuu-myku puu-tuu-mto-t nuunu, laxtcha*
 who EMPH most SBJ:PCP-be.first AOR-2-see-PST:TR DEM thing
 7853 *puu-nnu-ηu, turme puu-nnu-ηu nuu, azuay nui-k^hym*
 PST.IPFV-AUTO-be person PST.IPFV-AUTO-be DEM 1SG:GEN IMP-give[III]
 7854 *tce tcendyre, azo puu-ta-lxt jy*
 LNK LNK 1SG IPFV-1→2-release be.possible:FACT
 7855 'Give me the first thing you see (when you go back home), be it a person
 7856 or an object, and I will release you.' (140506 shizi he huichang de
 7857 bailingniao-zh, 50-52)

8 Postpositions and relator nouns

- 7858 (73) *jx-tsum tce icq^ha nur kuaβba nur yur*
 IMP-take.away LNK the.aforementioned DEM noble DEM GEN
 7859 *a-nur-tuu-k^hym*
 IRR-PFV-2-give[III]
 7860 Take it and give it to the nobleman.' (150831 renshen wawa-zh, 43)

7861 The recipient of the verb *k^ho* 'give, pass over' can alternatively also be marked
 7862 by a possessive prefix on the inalienably possessed noun *tu-jas* 'hand' (with
 7863 the meaning 'hand over', §8.3.6) or, with the dative relator nouns *w-cki* or *w-pe*
 7864 (§8.3.1).

7865 The genitive is selected by a few intransitive modal verbs to indicate the ex-
 7866 periencer/beneficiary, in particular *ra* 'be needed', 'need', *bzzi* 'be necessary', as in
 7867 (74) and (75).

- 7868 (74) *azuy wu-cyru ra*
 1SG:GEN 3SG.POSS-bone be.needed:FACT
 7869 'I want its bones.' (07-deluge, 9)
- 7870 (75) *azuy wuma zo bzzi jnu-ŋu, a-ky-ntc^hoz*
 1SG:GEN really EMPH be.necessary:FACT SENS-be 1SG.POSS-OBJ:PCP-use
 7871 *sna jnu-ŋu*
 be.good:FACT SENS-be
 7872 'It will be useful for me, it will have good use of it.' (150902 hailibu-zh,
 7873 44-45)

7874 The experiencer/beneficiary can also be marked by possessive prefixes on the
 7875 subject, without genitive, as in (76) (see also §5.1.1.4 for additional examples).

- 7876 (76) *azo a-ŋjul a-χsrr ra mx-ra*
 1SG 1SG.POSS-silver 1SG.POSS-gold PL NEG-be.needed:FACT
 7877 'I don't need silver or gold.' (2014-kWLAG, 367)

7878 Other intransitive verbs selecting genitive arguments include *ŋgru* 'succeed'.
 7879 In (77), in addition to the oblique 2SG argument *nŋzuy*, the verb takes the infinitival
 7880 complement clause *βdaŋmu ky-ndo* as intransitive subject.

- 7881 (77) *[βdaŋmu ky-ndo] nŋzuy a-pw-ŋgru q^he, tcendyre tu-tui-ŋke*
 queen INF-take 2SG:GEN IRR-PFV-succeed LNK LNK IPFV-2-walk
 7882 *maka mx-ra*
 at.all NEG-need:FACT
 7883 'If you succeed in becoming the queen, you will not need to walk
 7884 anymore.' (140504 huiguniang-zh, 197-198)

7885 The genitive also occurs with beneficiaries/maleficiaries as adjuncts, not se-
 7886 lected by the main verb, with transitive verbs such as *n̄ma* ‘do’ (78) and *wum*
 7887 ‘collect’ (81) or stative intransitive verbs such as *pe* ‘be good’ as in (79) with the
 7888 meaning ‘be favourable, advantageous to’. It is not the only possible way of ex-
 7889 pressing beneficiary; the relator noun *u-tar* also has this function in collocation
 7890 with the stative verb *pe* ‘be good’ (§8.3.4.3), with the slightly different meaning
 7891 ‘be nice to’.

- 7892 (78) *n̄zaway tc^{hi} tu-n̄yme-a ra, ty-ti*
 2SG:GEN what IPFV-do[III]-1SG be.needed:FACT IMP-say
 7893 ‘Tell me what I shall do for you.’ (140511 alading-zh, 175)

- 7894 (79) *u-fso t^hu-wxti tce azuay mx-pe*
 3SG.POSS-tomorrow AOR-be.big LNK 1SG:GEN NEG-be.good:FACT
 7895 ‘In the future, when he will have grown up, he will cause me trouble.’ (‘he
 7896 will not be good to me’, 2011-05-nyima, 22)

7897 The beneficiary adjunct is not necessarily contiguous with the verb on which
 7898 it depends, as in (80) where the genitive phrase *izora yu* ‘for us, on our behalf’
 7899 is separated from the verb *t^hu* ‘ask’ by a lengthy complement comprising two
 7900 clauses.

- 7901 (80) *izora yu [tc^{hi} tu-fse-j tce ji-tui-ci*
 1PL GEN what IPFV-be.like-1PL LNK 1PL.POSS-INDEF.POSS-water
 7902 *yzyu] tu-tui-t^he u-tú-c^{ha}?*
 exist:SENS IPFV-2-ask[III] QU-2-can:FACT
 7903 ‘Can you ask on our behalf how we should do to have water?’
 7904 (2005tamukatsa, 14)

7905 Beneficiary genitive phrases can occur as predicates with a copula as *uzyy*
 7906 ‘3SG:GEN’ in (81).

- 7907 (81) *t^hobtym ka-wum tce, uzyy pjy-ma^b kui, tcoxtsi rjylp*u**
 taxes AOR:3→3'-collect LNK 3SG:GEN IFR.IPFV-not.be ERG ANTHR king
 7908 *yu ku-wum,*
 GEN IPFV-collect
 7909 ‘The taxes that he had collected were not for himself, he was collecting
 7910 them for the king of Cogtse.’ (150901 NAjstsa, 28)

7911 In this use too, it is alternatively possible to indicate the beneficiary as a pos-
 7912 sessive prefix on the object, without genitive postposition, as in (82).

- 7913 (82) *χsyr k^hutsa w-ŋgu* *nuitcu* *a-tur-ci* *ci*
 gold bowl 3SG.POSS-inside DEM:LOC 1SG.POSS-INDEF.POSS-water a.little
 7914 *tr-rke* *ma wuma juu-çpaŋ-a*
 IMP-put.in[III] LNK really SENS-be.thirsty-1SG
 7915 ‘Please pour some water in the golden bowl for me, I am thirsty.’ (140428
 7916 mu e guniang-zh, 47)

7917 The genitive is also attested with a noun-verb collocations (§22.4), like *wu-*
 7918 *kÿrnɔs + mtçur* ‘feel dizzy’, in which the possessor of the noun is an experiencer
 7919 as in (83). This example also illustrates the use of the genitive followed by a focus
 7920 marker, as (65) above.

- 7921 (83) *tceri fsapaŋ yuu kumy w-kÿrnɔs* *juu-mtçur juu-ŋu*
 LNK animal GEN also 3SG.POSS-head SENS-turn SENS-be
 7922 ‘But animals too can feel dizzy.’ (29-tAmtshAzkAkWndo, 71)

7923 Finally, the experiencer subject argument demoted by the proprietive derivation
 7924 can also in some cases be optionally encoded with the genitive case (see
 7925 example 181, §18.8).

7926 8.2.3.3 Other uses

7927 The genitive *yuu* occurs with various types of noun complements which are se-
 7928 mantically neither possessive or beneficiaries/recipients.

7929 Nouns used as prenominal modifiers are in rare cases followed by a genitive
 7930 postposition before the head noun. If the head noun is an alienably possessed
 7931 noun, the presence of a third singular possessive prefix *wu-* is optional, as shown
 7932 by examples such as (84) and (85).

- 7933 (84) *χsyr yuu, nykinuu, k^hutsa ci* *to-nuu-ndo.*
 gold GEN FILLER bowl INDEF IFR-AUTO-take
 7934 ‘He took a golden bowl’ (140508 shier ge tiaowu de gongzhu-zh, 158)

7935 This type of construction is most common in texts translated from Chinese, but
 7936 does also occur in more spontaneous material as in (85), with a complex modifier
 7937 *ftsɔr kungut w-p^huu* ‘the price of nine female hybrid yaks’.

- 7938 (85) *tcendyre ur-jas nautcu [ftsob kunguit ur-p^hu]*
 LNK 3SG.POSS DEM:LOC female.hybrid.yak nine 3SG.POSS-price
 7939 *yuu srumlōs pjy-k-γ-rku-ci*
 GEN ring IFR.IPFV-PEG-pass-put.in-PEG
 7940 ‘She had a ring worth nine female hybrid yak in her hand.’ (2003gesar,
 7941 239)

7942 In a construction with a prenominal modifier marker in the genitive, even
 7943 when a possessive prefix is present on the head noun (in particular when it is an
 7944 inalienably possessed noun), that prefix does not necessarily refer to the modi-
 7945 fier. For instance, in (86), the third plural possessive prefix *nu-* on *nu-mgozmvryβ*
 7946 ‘their vegetables’ refers to the people eating the vegetable, not the modifier *tux-*
 7947 *palvskyr* ‘the whole year’ (on whose formation see §5.7.8.3) which would require
 7948 a third singular prefix instead (an option which is also attested with this noun).
 7949 Alternatively, it is also possible to have an indefinite possessor prefix on the head
 7950 noun if inalienably possessed, as in (87). Note that both options are attested in the
 7951 construction with a prenominal modifier without the genitive, as seen in §5.1.4.

- 7952 (86) *tce numu tuxpalvskyr yu nu-mgozmvryβ nu nu ma*
 LNK DEM whole.year GEN 3PL.POSS-vegetable DEM DEM apart.from
 7953 *pjy-me.*
 IFR.IPFV-not.exist
 7954 ‘It was the only vegetable that they had the whole year.’ (140522 kAmYW
 7955 tWji, 23)
- 7956 (87) *tui-xpa yuu tui-yli nu c^hú-wy-tcxt*
 one-year GEN INDEF.POSS-manure DEM IPFV:DOWNSTREAM-INV-take.out
 7957 *tú-wy-rmbu*
 IPFV-INV-heap
 7958 ‘People take out (from the stable) the whole year’s manure and heap it
 7959 up.’ (2010-tArAku)

7960 Some apparently unclassifiable uses of the genitive can be accounted for to
 7961 some extent by assuming the elision of a head noun. For instance, in (88), the
 7962 phrase *izora yu*, meaning ‘in our language’, can be explained as coming from
 7963 *izora yuu ji-skrt* ‘our language’ used as a absolutive locative phrase (§8.1.9) ‘in
 7964 our language’, with elision of the head noun. This example does not illustrate a
 7965 separate function of the genitive: it is simply a particular case of possessive.

- 7966 (88) <*longtoutan*> *nua* *kupa-skyl* *cti.* *tce* *izora yuu* *tc^{hi}*
 7967 TOPO DEM Chinese-language be.AFF:FACT LNK 1PL GEN what
tu-kui-ti *ŋu* *mr-xsi.*
 7968 IPFV-GENR-say be:FACT NEG-GENR:know
 7969 ‘Longtoutan is a Chinese word; I don’t know how it is said in our
 (language).’ (150820 qaprANar, 32)

7970 The same is true of the use of the genitive with the verb *mŋym* ‘be painful’
 7971 and its causative *ŋumŋym* ‘cause to be painful’, which take a body part (not the
 7972 person or animal feeling pain) as their subject and object, respectively. In (89),
 7973 the genitive first person *azuy* ‘1SG:GEN’ is not an oblique argument or even a
 7974 malefactive adjunct. Rather, its presence implies an elided noun *a-βri* ‘my body’
 7975 (‘he caused pain to my body’). It is however likely that sentences like this are the
 7976 pivot constructions which made possible the reanalysis of possessive genitive
 7977 phrases as benefactive/malefactive adjuncts.

- 7978 (89) *azuy* *ta-cui-mŋym*, *azuy* *a-laxtca^ha* *ra*
 7979 1SG:GEN AOR:3→3'-CAUS-be.painful 1SG:GEN 1SG.POSS-thing PL
ja-nui-tsum-nua
 7980 AOR:3→3'-VERT-take.away-PL
 ‘He hurt me and took away my things.’ (140426 luozi he qiangdao, 35)

7981 The genitive can also occur between prenominal relatives (§23.2.3) and their
 7982 head noun. In this construction the head noun generally does not take a posses-
 7983 sive prefix. This type of relative is particularly common in story translated from
 7984 Chinese, where it calques the prenominal relatives in 的 <de>, as in (90). The
 7985 same situation has been observed in Khroskyabs (Lai 2017: 640–643).

- 7986 (90) [*kui-yndzo* *ri* *kui-me*], [*kui-sy-mtsur* *ri*
 7987 SBJ:PCP-be.cold also SBJ:PCP-not.exist SBJ:PCP-PROP-be.hungry also
kui-me], [*ky-nusumuzduy* *ri* *mr-kui-ra*] *yuu*
 7988 SBJ:PCP-not.exist INF-worry also NEG-SBJ:PCP-be.needed GEN
sytca^ha *nutcu* *jo-ce-ndzi* *ŋu-ŋu.*
 place DEM:LOC IFR-go-DU SENS-be
 7989 ‘The two of them went to a place where they was cold cold and hunger,
 7990 and where one did not need to worry.’ (140519 mai huochai de xiao
 7991 nvhai-zh, 182-183)

7992 However, this type of relative is also attested, though rarer, in non-translated
 7993 texts, for instance in (91) with intransitive subject relativization.

- 7994 (91) *tce [tu-xpa tu-kui-tob]* *yuu sujno nuu ηu tce,*
 LNK one-year IPFV-SBJ:PCP-come.out GEN TOPO DEM be:FACT LNK
 7995 ‘It is an annual plant.’ (18-NGolo, 105)

7996 Genitival prenominal relative clauses are to be distinguished from relatives as
 7997 possessors, as in (92), where the possessum *w-rjyŋgo* ‘its radiating pain’ is not an
 7998 argument of the relative *tu-çya kui-mŋym* ‘a tooth that hurts’.

- 7999 (92) *tu-çya a-tx-mŋym tce tce tx-rca*
 8000 GENR.POSS-tooth IRR-PFV-be.painful LNK LNK INDEF.POSS-following
tu-ymba, tu-ku nura tu-mŋym nuu-ηu tce,
 8001 GENR.POSS-cheek GENR.POSS-head DEM:PL IPFV-be.painful SENS-be LNK
nunu “[tu-çya kui-mŋym] yuu w-rjyŋgo
 8002 DEM INDEF.POSS-tooth SBJ:PCP-be.painful GEN 3SG.POSS-radiating.pain
yyzu” tu-kui-ti ηu.
 8003 exist:SENS IPFV-GENR-say be:FACT
 8004 ‘When one has a toothache, and that one feels pain in one’s cheek or a
 8005 headache, one says ‘the toothache has a radiating pain.’ (140516
 WrJANgo, 3)

8006 Adnominal complement clauses (§24.6) can also take a genitive marker, as in
 8007 (93).

- 8008 (93) [*<donggua> c^ho <qiezi> ni tc^hi zo māij-naχteuy*] *yuu*
 8009 gourd COMIT eggplant DU what EMPH NEG:SENS-be.the.same GEN
wi-tc^ha a-jy-tu-yuit ra
 8010 3SG.POSS-information IRR-PFV-2-bring be.needed:FACT
 8011 ‘(Go there and come back to) tell me in what way gourd and eggplant
 differ from each other.’ (2010-02-yitian bi yitian-zh, 7)

8012 Some relative clauses can take possessors marked in the genitive, as in (94)
 8013 and (95). It is debatable whether the genitival phrase belongs to the relative in
 8014 this type of construction.

- 8015 (94) *tce paŋ yuu [stu wi-ky-nuŋga], izora*
 8016 LNK pig GEN most 3SG.POSS-OBJ:PCP-want.from 1PL
ji-ky-nuŋga nuu wi-ca ηu tce
 8017 1PL.POSS-OBJ:PCP-want.from DEM 3SG.POSS-meat be:FACT LNK
 8018 ‘What is most wanted from pigs, what we want from them is their meat.’
 (05-paR, 13)

- 8019 (95) *slama ra yuu [t^huit^hyci kur-fse], nuu ky-ry-βzjoz ra*
 student PL GEN something SBJ:PCP-be.like DEM INF-ANTIPASS-learn PL
 8020 *nuu-stu múa-j-stu nuu, nuu-stu jnu-nyma-nuu*
 SENS-be.assiduous SENS-be.assiduous DEM 3PL.POSS-truth SENS-work-PL
 8021 *múa-j-nyma-nuu, nunura nuu-p^hama ra nuu-cki*
 NEG:SENS-work-PL DEM:PL 3PL.POSS-parent PL 3PL.POSS-DAT
 8022 *kur-ry-fcxt jnu-ra.*
 GENR:S/O-ANTIPASS-tell:FACT SENS-be.needed
 8023 ‘One had to tell the parents all kinds of things concerning the students,
 8024 whether they try hard or not, whether they work seriously or not.’
 8025 (150901 tshuBdWnskAt, 18-20)

8026 The genitive *yuu* can optionally be used after the object in purposive comple-
 8027 ments (§24.4.2.1) containing a transitive verb as in (96); in this type of clauses,
 8028 the verb is in subject participial form and transitive verbs take a possessive pre-
 8029 fix coreferent with the object (§16.1.1.1).

- 8030 (96) *rgytpu nuu yuu ui-kua-rtos jo-yi.*
 old.man DEM GEN 3SG.POSS-SBJ:PCP-see IFR-come
 8031 ‘He came to see the old man.’ (150908 menglang-zh, 12)

8032 8.2.4 Locative

8033 8.2.4.1 Core locative postpositions

8034 There are three locative postpositions in Japhug, *zuu*, *tçu* and *ri*, the latter being
 8035 homophonous with the correlative additive focus *ri* (§9.1.6.2). The exact condi-
 8036 tions of their uses is still an unsolved problem of Japhug grammar. They appear
 8037 to be always optional (goals and locative adjuncts can always be in absolute
 8038 form, see §8.1.8 and 8.1.9) and seem to be interchangeable, as is illustrated in this
 8039 section.

8040 All three postpositions can be used to express static location, motion into, mo-
 8041 tion or from a place. Location or motion (into/from/on) a surface, (into/from/in)
 8042 a container or with/without contact does not seem to be relevant factors for the
 8043 selection of the locative postpositions.

8044 The locative *tçu* is most often used in combination with a demonstrative *nuu*
 8045 as in (97), a form identical to the locative of the demonstrative pronoun (*nutçu*
 8046 ‘there’, see §6.9.3). Without demonstrative, *tçu* is also found as in (98) and (99).

- 8047 (97) *japa tce alo <ercha> nutcu, n̥kinuu, icq^ha ts^hapa co*
 last.year LNK upstream TOPO DEM:LOC FILLER FILLER TOPO valley
 8048 *nutcu tuŋyt c^hy-yi.*

DEM:LOC rock.slide IFR:DOWNTREAM-come

- 8049 ‘Last year, at Ercha, at the valley of Tshapa, there was a rock slide.’
 8050 (160715 nWNa, 1)

- 8051 (98) *jo-nui-ce tce, tsu tcu ny-mtsur,*
 IFR-AUTO-go LNK road LOC IFR-be.hungry
 8052 ‘He went away, and on the road he felt hungry.’ (2002qajdoskAt, 109)

- 8053 (99) *k^hyxtyndo tcu ko-zo*
 side.of.the.top.terrace LOC IFR-land
 8054 ‘(The raven) landed on the side of the top terrace.’ (2002qajdoskAt, 24)

8055 The above examples show *tcu* used for location without motion (97), motion
 8056 via a place (98), motion onto a place resulting in contact with the surface (99),
 8057 and (100) illustrates *tcu* expressing motion from the inside.

- 8058 (100) *nunuu kuiβka ra yui nui-k^ha u-kum nutcu*
 DEM nobleman PL GEN 3PL.POSS-house 3SG.POSS-door DEM:LOC
 8059 *c^hy-nui-łob tce,*
 IFR:DOWNTREAM-AUTO-come.out LNK
 8060 ‘He went out from the door of the nobleman’s house.’ (140513 mutong de
 8061 disheng-zh, 166)

8062 The same diversity of uses is found with the locative *zu*; (101) shows *zu* ex-
 8063 pressing static location ('in their hands') and motion from a place ('from the sky').
 8064 Example (102) illustrates *zu* used with the verb *zo* 'land', which is attested with
 8065 *tcu* in (99). Note that in another version of the same story by the same speaker,
 8066 the relator noun *u-taꝝ* 'on' (§8.3.4.1) is found instead of a locative postposition
 8067 (see 3 in §5.1.1.2).

- 8068 (101) *tumukyrji u-me kuiçnuż nui nui-jav zui, n̥kinuu,*
 heaven 3SG.POSS-daughter seven DEM 3PL.POSS-hand LOC FILLER
 8069 <*shanzi*> *kui-mpeu~mperr zo, qale*
 fan SBJ:PCP-EMPH~be.beautiful EMPH wind
 8070 *u-sy-lxt nui pjy-k-ysu-ndo-nui-ci tce,*
 3SG.POSS-OBL:PCP-release DEM IFR.IPFV-PEG-PROG-hold-PL-PEG LNK

- 8071 *tumunymkʰa zuu pjy-nur-tob-nuu.*
 sky LOC IFR:DOWN-AUTO-come.out-PL
- 8072 ‘The seven daughters of heaven, holding beautiful fans in their hands,
 8073 came down from the sky.’ (150828 niulang-zh, 48)
- 8074 (102) *a-mbro uu-jme zuu kyr-zo,*
 1SG.POSS-horse 3SG.POSS-tail LOC IMP-land
 8075 ‘Land on my horse’s tail.’ (2014-kWLAG, 562)

8076 The postposition *zuu* is related to the suffix *-s* in Situ, which expresses motion
 8077 from an origin or towards a goal (Lín 1993: 330–331). Situ is certainly most archaic
 8078 in this regard (as it also preserves a locative *-j* suffix of which only lexicalized
 8079 traces remain in Japhug, §8.2.4.4), and the Japhug form has to be explained as
 8080 debonding from suffix to clitic to independent word (see 33 in §8.2.1 for evidence
 8081 that *zuu* is not a clitic). Japhug-internal evidence for the degrammaticalization is
 8082 the otherwise unexplainable voicing to *z*, a process that applied to all fricative
 8083 codas (§3.2.2), and the fact that some frozen forms preserve a *-z* suffix, in particu-
 8084 lar the approximate locative *cʰiz* (§8.2.4.2), the related indefinite pronoun *ciscʰiz*
 8085 ‘somewhere’ (§6.6.5) and the relator *uu-ŋguuz* ‘among’ (see 222 and 223 in §8.3.4.2)
 8086 and the postposition *uzaz* ‘while ... still’ (§5.8.3).

8087 The locative *ri* also occurs in all the meanings attested above for *t̪cu* and *zuu*,
 8088 though due to homophony with the additive correlative *ri* (§9.1.6.2), some exam-
 8089 ples are ambiguous. Examples (103) and (104) show the locative *ri* marking static
 8090 location and motion towards a place, respectively.

- 8091 (103) *kʰyxtu ri puu-ryzi-a tce tx-mtʰuum tu-ndze-a*
 terrace LOC PST.IPFV-stay-1SG LNK INDEF.POSS-meat IPFV-eat[III]-1SG
 8092 *puu-ŋu ri,*
 PST.IPFV-be LNK
 8093 ‘I was on the terrace eating meat.’ (150909 qandZGi, 5)
- 8094 (104) *tce nuu nuu-kʰa ri uuzo kyr-ari uu-qʰu tce,*
 LNK DEM 3PL.POSS-house LOC 3SG AOR:EAST-go[II] 3SG.POSS-after LNK
 8095 ‘After he went to their (his wife’s family’s) house...’ (14-siblings, 210)

8096 The same interchangeability and optionality of the locative postpositions is ob-
 8097 served when these are combined with relator nouns (§8.3.4.5). Although the three
 8098 postpositions are almost identical in their range of uses, there are nevertheless
 8099 differences in their compatibilities. With the locative demonstrative pronouns

8100 *ku*re ‘here’, and *nure* ‘there’ (§6.9.3) as well as *asvndundrt* ‘everywhere’, only *ri*
 8101 can be added, as in (105). The postpositions *t̄eu* and *zu* can be combined as *nut̄eu*
 8102 *zu* as in (106); no other combination of locative postpositions are possible.

- 8103 (105) *tcendyre ts^huβdum kui-sy-suvcyt lx-ari-a. t̄ce*
 LNK TOPO NMLZ-ANTIPASS-teach AOR:UPSTREAM-go[II]-1SG LNK
 8104 *nure ri li a-kumpya pur-tu t̄ce*
 DEM:LOC LOC again 1SG.POSS-hen PST.IPFV-exist LNK
 8105 ‘I went to Tshobdun to teach. There, I had a hen again.’ (150819 kumpGa,
 8106 78-79)
- 8107 (106) *wzo tcekua nutcu zuw pjy-ryzi q^he*
 3SG EAST DEM:LOC LOC IFR.IPFV-stay LNK
 8108 ‘He was on the east side.’ (28-qAjdoskAt, 152)

8109 All three postpositions are also used with time adjuncts, but do present some
 8110 noticeable differences in usage. They can be interchangeably used with temporal
 8111 relator nouns such as *u-ray* ‘during, the time when’ (§8.3.5), but in other contexts

8112 With counted nouns expressing time (§7.5.1), there is not a single example with
 8113 *zu* in the corpus. The postposition *ri* is used to express a point in time (as in 107),
 8114 while *t̄eu* mostly means ‘within (the time period)’ as in (108).

- 8115 (107) *tui-xsoz ri t̄ce jo-yi ri, ui-βri tyzri yyzu,*
 one-morning LOC LNK IFR-come LNK 3SG.POSS-body dew exist:SENS
 8116 *jui-yci.*
 SENS-be.wet
 8117 ‘One morning, (our hen) came (back from the forest, where it was laying
 8118 eggs) and its body was wet from the dew.’ (150819 kumpGa, 21-22)

- 8119 (108) *tui-xpa nutcu [...] tui-tuip^hu, yzo nara ku, yzyzga nunu, nunu*
 one-year DEM:LOC one-hive bee DEM:PL ERG honey DEM DEM
 8120 *squi-turpa ui-ro nui ku-su-xtua-nui jui-c^ha-nui.*
 ten-pound 3SG.POSS-excess DEM IPFV-CAUS-accumulate-PL SENS-can-PL
 8121 ‘In one year, one hive, the bees, the honey, they can gather more than
 8122 ten pounds of it.’ (26-GZo, 34-36)

8123 The form *t̄ce*, which is mainly analyzable as a linker (§25.1.6) and in some cases
 8124 a topic marker (§9.1.5.5) occurs with locative and temporal adjuncts and could be
 8125 analyzed as a postposition in these usages (see also §8.2.4.4). With the temporal
 8126 counted nouns, like *ri* it expresses a specific point in time as in (109) rather than
 8127 a duration.

- 8128 (109) *tce tu-sŋi tce ny-k-xtury-ci tce,*
 LNK one-day LNK IFR-PEG-meet-PEG LNK
 8129 ‘One day, (the bear finally) met (the rabbit).’ (2011-13-qala, 22)

8130 8.2.4.2 Approximate locative

8131 The suffix *-c^hu* is used to indicate approximate location, referring to a broad area
 8132 rather than a specific place, like the plural *ra* (§9.1.1.2). In (110) it means ‘area/
 8133 region’, while in (111) it can be translated as ‘side’ and is opposed to *u-stu* ‘straight,
 8134 side’.

- 8135 (110) *tce kupa-c^hu nura, at^hi pcos nura,*
 LNK Chinese-APPROX.LOC DEM:PL downstream side DEM:PL
 8136 *u-pci nura kuu kure ri*
 3SG.POSS-outside DEM:LOC ERG DEM.PROX:LOC LOC
 8137 *yuu-c^hu-su-χtua-nuu ηu.*
 CISL-IPFV:DOWNSTREAM-CAUS-but-PL be:FACT
 8138 ‘People from Chinese areas, from downstream, from outside, send
 8139 (people) here to buy (these mushrooms).’ (20-grWBgrWB, 59)

8140 It also occurs with various relator nouns, in particular *u-q^hu* ‘after, behind’ and
 8141 *u-ŋgu* ‘inside’ as in (111) and (112), respectively. The form *u-q^hu-c^hu* exclusively
 8142 has a locative meaning, unlike *u-q^hu* which can be used with the temporal mean-
 8143 ing ‘after’. Note that *u-ŋgu* undergoes vowel assimilation to [uŋguc^hu], showing
 8144 that it must be analyzed as a suffix rather than as a postposition. Most relator
 8145 nouns cannot be used with *c^hu*, for instance one cannot say †*u-ŋyri-c^hu*.

- 8146 (111) *u-jwaŋ u-ŋyri u-stu nuu juu-yrŋi,*
 3SG.POSS-leaf 3SG.POSS-front 3SG.POSS-direction DEM SENS-be.green
 8147 *u-jwaŋ u-q^hu-c^hu nuu juu-pyi,*
 3SG.POSS-leaf 3SG.POSS-behind-APPROX.LOC DEM SENS-be.grey
 8148 ‘The upper side of its leaves is green, and the lower side is grey.’
 8149 (13-NanWkWmtsWG, 8)

- 8150 (112) *tce u-xtypa c^ho u-mi, u-jar,*
 LNK 3SG.POSS-lower.belly COMIT 3SG.POSS-foot 3SG.POSS-hand
 8151 *u-ŋgu-c^hu nura juu-wyrum.*
 3SG.POSS-INSIDE-APPROX.LOC DEM:PL SENS-be.white
 8152 ‘The lower part of its body, its feet, its paws, the inside part are white.’
 8153 (20-xsar, 23)

8154 The approximate locative *-c^hu* is commonly used in particular with the *lo* ‘up-
 8155 stream’ / *t^hi* ‘downstream’ and *k^u* ‘east’ / *ndi* ‘west’ locative adverbs (§22.2.6), as
 8156 in (113).⁶

- 8157 (113) *pa juul pcors n^hki, t^uu-ji w-rk^u nuara maka*
 down village side FILLER INDEF.POSS-field 3SG.POSS-side DEM:PL at.all
 8158 *me. run^hgu k^unγ lo-c^hu konja zo*
 not.exist:FACT pasture also upstream-APPROX.LOC completely EMPH
 8159 *k^uu-y^hndzo myct^ha t^hi nuara me*
 SBJ:PCP-be.cold until downstream DEM:PL not.exist:FACT
 8160 ‘It is not found down in the villages, near the fields. Even on the
 8161 pastures, it only exists at high altitudes where it is very cold, not lower.’
 8162 (15-babW, 116-117)

8163 The suffix *-c^hu* is itself related to the indefinite locative postpositions *c^hiz* and
 8164 *sc^hiz* ‘at/in/towards a X, somewhere where X’ as in (114), which come from the
 8165 combination of *-c^hu* with the locative suffix *-z* (degrammaticalized as the locative
 8166 postposition *zuu*, see §8.2.4.1). For the notation *-iz* (instead of the more etymolog-
 8167 ical *-uz*) here, see §3.5.2. In the case of the variant *sc^hiz*, the root of *-c^hu* was both
 8168 prefixed and suffixed by the locative *-z*.

- 8169 (114) *tce tcek^u~k^uu zo sc^hiz sys^hoŋ zo sc^hiz*
 LNK east~EMPH EMPH INDEF.LOC desert EMPH INDEF.LOC
 8170 *ky-azyut-nu^u pui-ŋu, n^hki, si ri k^uu-me, rdystab*
 AOR:EAST-reach-PL SENS-be FILLER tree also SBJ:PCP-not.exist stone
 8171 *ri kur-me sc^hiz zo ky-azyut-nu^u pui-ŋu.*
 also SBJ:PCP-not.exist INDEF.LOC EMPH AOR:EAST-reach-PL
 8172 ‘Further east, they arrived at a desert, somewhere where there were
 8173 neither trees nor stones.’ (2005 Kunbzang, 169-170)

8174 The postpositions *c^hiz* and *sc^hiz* have reduced forms *c^huu* and *sc^huu* with loss of
 8175 final *-z* (see 115 below), probably originally sandhi variants.

- 8176 (115) *nuu-rjara c^huu pjy-k-ymdzuu-ci tce,*
 3PL.POSS-yard INDEF.LOC PST.IPFV-PEG-sit-PEG LNK
 8177 ‘She was sitting in their yard.’ (150907 yingning-zh, 61)

8178 There is also a rarer disyllabic variant of the approximate locative *c^hizuu* as in
 8179 (116), with the fully syllabic form *zuu* of the locative postposition.

⁶For the use of *myct^ha* ‘until’ to express restrictive focalization in (113), see §8.2.9.

- 8180 (116) *tua-βzur c^hizu, nyki, kui-spos ci*
 INDEF.POSS-corner INDEF.LOC FILLER SBJ:PCP-have.a.hole INDEF
 8181 *pjy-tu tce,*
 IFR.IPFV-exist LNK
 8182 ‘In one of the corners, there was a hole.’ (140510 sanpian sheye-zh, 64)

8183 Some nouns use a suffix *-c^hu* (homophonous with the reduced form of *c^hiz*
 8184 in 115) to indicate direction, and are not compatible with *c^hiz* and other forms:
 8185 *myrçor-c^hu* ‘towards the opposite side’ and *tua-mu-c^hu* ‘towards the sky’, the lat-
 8186 ter mainly used with the verb *ru* ‘look at’ to mean ‘lying on one’s back face up
 8187 (towards the sky)’ as in (117).

- 8188 (117) *tce tua-mu-c^hu nuw u-kui-ru nuw*
 LNK INDEF.POSS-sky-towards DEM 3SG.POSS-SBJ:PCP-look.at DEM
 8189 *u-ymr u-ŋguu zo c-pjy-lxt,*
 3SG.POSS-mouth 3SG.POSS-inside EMPH TRAL-IFR-release
 8190 ‘It dropped (the medicine) inside the mouth of (Gesar), who was lying
 8191 on his back) face up towards the sky.’ (Gesar, 265)

8192 8.2.4.3 *tce*: linker or postposition

8193 The word *tce* is one of the most common words in Japhug, and it has several
 8194 different morphosyntactic functions, including that of linker (§25.1.6) and topic
 8195 marker (§9.1.5.5). In addition, it is also used as a postposition, expressing both
 8196 motion and location; it especially commonly occurs with an ablative meaning,
 8197 as in (118) and (119). Its etymology is discussed in the following section (§8.2.4.4).

- 8198 (118) *kutcu zgo tce tcekua zgo*
 DEM.PROX:LOC mountain LOC east mountain
 8199 *ku-nu-tsuum nuw-ŋgryl ma*
 IPFV:EAST-AUTO-take.away SENS-be.usually.the.case LNK
 8200 ‘(The crossoptilon) would take (the weasel) from the mountain here to
 8201 the mountain over there (on the other side of the river).’
 8202 (23-qapGAmWmtW, 88)
- 8203 (119) *tua-ci nuara pa tce tab uja zo*
 INDEF.POSS-water DEM:PL down LOC up completely EMPH
 8204 *yuu-tsuum pjy-ra.*
 INV-take.away:FACT IFR.IPFV-be.needed
 8205 ‘One had to bring water from the lower part (of the valley) upwards.’
 8206 (140522 RdWrJAt, 9)

8207 The postposition *tce* is also found with temporal adjuncts, as in (120).

- 8208 (120) *qartsuu tce nuu-jpum ftcar tce tu-mbro nyu.*

winter LOC IPFV-be.thick summer LOC IPFV-be.high be:FACT

8209 ‘It grows thicker in winter, and taller in summer. (07-tAtho, 22)

8210 It appears in the expression *uu-sum tce* ‘in his opinion, in his mind’ as in (121)
 8211 and (122); the core locative postpositions are not used in this meaning.

- 8212 (121) *azo a-sum tce, nuu-bruu zo yyzu cti tce*
 1SG 1SG.POSS-mind LOC 3PL.POSS-horn EMPH exist:SENS be.AFF:FACT LNK
 8213 ‘In my opinion, (since) they have horns, (they should be able to fight the
 8214 predators off).’ (20-RmbroN, 64)

- 8215 (122) *tce uzo uu-sum tce tce tu-tsum tce tcendyre izora*
 LNK 3SG 3SG.POSS-mind LOC LNK IPFV:UP-take LNK LNK 1PL
 8216 *ji-sytc^{ha} ra lonba zo tuu-ci nuu-su-^yβze*
 1PL.POSS-place PL all EMPH INDEF.POSS-water IPFV-CAUS-become[III]
 8217 *to-βmuuy.*
 IFR-have.the.intention
 8218 ‘In his mind, (the snake) wanted to take the water upwards and
 8219 transform our whole area into water.’ (150820 qaprANar, 20)

8220 Distinguishing between the uses of *tce* as a postposition and as a topic marker
 8221 (§9.1.5.5) is not always trivial; it is analyzed as a topic marker when it can be
 8222 replaced by *nuu* §9.1.5.4, or when two *tce* appear in a row as in (122): in this case,
 8223 the first one is a postposition and the second one a topic marker.

8.2.4.4 Traces of the locative suffix *-j

8224 Situ has a locative suffix *-j*, also used in the possessive construction (Lín 1993:
 8225 325–330), which has disappeared in Japhug, though a few traces remain.

8226 The form *tce*, which is mainly used as a linker (§25.1.6) and also occurs as
 8227 postposition (§8.2.4.3) and as a topic marker (§9.1.5.5), probably originates from
 8228 the combination of the locative postposition *tcu* and the locative suffix *-j, with
 8229 vowel merger at a stage preceding the sound change *o → u (*tco-j → tce; see
 8230 §3.3.3 for a discussion of these sound changes).

8231 Another trace of the locative suffix *-j is found in the linker *q^he* ‘then’ and the
 8232 time ordinal *q^huj* ‘this afternoon’ (§7.5.2), combining the relator noun *uu-q^hu* ‘after’

(§8.3.5) with the coda *-j, in the former with vowel fusion (an earlier lexicalization), and the latter without fusion. The form *qʰuj* ‘this afternoon’ shows that the suffix *-j was still productive in Japhug after the sound change *o → u took place.

The interrogative pronoun *yoj* ‘where’, variant of *yoṭcu* ‘where’ (§6.5.4), also has a trace of the *-j suffix without vowel fusion.

Finally, the suffix -re in the locative pronouns *kure* ‘here’, *nure* ‘there’ and related forms is most probably the plural marker *ra* (§9.1.1.2) to which the locative *-j has been added, with the same vowel fusion as in the forms above (§6.9.3).

8.2.5 Comitative

Postpositional phrases with the comitative postposition *cʰo* ‘and, with’ and its variants *cʰondyre* and *cʰony* (comprising the additive *ny* and the linker *ndyre*) are selected by verbs with non-singular subjects (§14.2.6), including *naχtcuy* ‘be the same’ (§9.1.7), *amumi* ‘be in good terms with’ (123), *rṛkryz* ‘discuss’ and reciprocal verbs (§18.4.1).

- (123) [uzo *cʰo*] *kui-naχtcuy* [stujno, *xcaj ma*
 3SG COMIT SBJ:PCP-be.the.same vegetables grass apart.from
mx-kui-ndza *nura cʰony*] *amumi-nu* *tce,*
 NEG-SBJ:PCP-eat DEM:PL COMIT be.in.good.terms:FACT-PL LNK
 ‘(The rabbit) is in good terms with (the animals) which eat only grass
 and vegetables like him.’ (04-qala2, 8)
- (124) [*kʰu chondyre*] *mbro ni to-rṛkryz-ndzi.*
 tiger COMIT horse DU IFR-discuss-DU
 ‘The tiger and the horse had a discussion.’ (20-tArka, 32)

Postpositional phrases in *cʰo* can be considered to be oblique arguments in the sense that they are relativized using the oblique participle (§16.1.3.7, §23.5.7). However, verbs that select *cʰo* phrases index not only the intransitive subject proper, but the sum of the subject and the *cʰo* phrase, which can be in the dual as in (125) (the white birch and the red birch) or in the plural (123) (the rabbit and the other animals).

- (125) *tce u-rqʰu nua yurni lašma u-ŋgu*
 LNK 3SG.POSS-bark DEM be.red:FACT apart.from.the факт 3SG.POSS-inside
*nua [syjku *cʰo*] pui-naχtcuy-ndzi ri*
 DEM birch COMIT SENS-be.the.same-DU LNK
 ‘Apart from the fact that its bark is red, it is identical in the inside with
 the birch.’ (06-mbrAj, 13)

8264 The verb *naxtçuy* ‘be the same’ with a *c^ho* phrase can be used in an equative
 8265 construction (§26.3.1.1).

8266 Apart from the function presented above, *c^ho* ‘and, with’ is commonly used to
 8267 link together two nouns inside a single noun phrase, as in (126). In this case too,
 8268 the main verb of the clause indexes the whole noun phrase, comprising the sum
 8269 of referents designated by the nouns linked by *c^ho*.

- 8270 (126) *a-wuu c^ho a-zi ni*
 1SG.POSS-grand.father COMIT 1SG.POSS-younger.sibling DU
 8271 *c^hui-yi-ndzi ra ma zyni-sti ky-ryzi*
 IPFV:DOWNSTREAM-come-DU be.needed:FACT LNK 3DU-alone INF-stay
 8272 *mx-c^ha-ndzi tce,*
 NEG-can:FACT-DU LNK
 8273 ‘My grandfather and my younger brother have to come, they cannot
 8274 stay by themselves.’ (2011-05-nyima, 209)

8275 The marker *c^ho* can also link verb phrases and even entire clauses (see §25.6.2.1
 8276 and Jacques 2014a: 313).

8277 Given the apparently equal status of the two linked nouns in (126), in parti-
 8278 cular with regard to indexation, it is legitimate to wonder whether analyzing it
 8279 as a postposition makes more sense than considering it to be a coordinator; this
 8280 question is explored in §9.2.1).

8281 A *c^ho* phrase can be followed by the associative plural marker *ra* (§9.1.1) as in
 8282 (127) to mean ‘et cetera’, and the whole phrase can take case marking such as
 8283 ergative.

- 8284 (127) *tceri uizo ndyre, qajdo c^ho ra kuu ndy tú-wy-ndza cti*
 but 3SG ADVERS CROW COMIT PL ERG ADVERS IPFV-INV-eat be.AFF:FACT
 8285 ‘But it is eaten by crows and other (animals).’ (26-NalitCaRmbWm, 140)

8286 The ergative *kuu* is however optional on comitative phrases, as shown by (128),
 8287 where ergative marking would be expected on the phrase *u-puu ra c^ho*.

- 8288 (128) *[u-puu ra c^ho] tuturca to-ndza-nuu tce*
 3SG.POSS-young PL COMIT together IFR-eat-PL LNK
 8289 *to-nuu-zyy-cuu-fka-nuu zo jnu-ju.*
 IFR-AUTO-REFL-CAUS-be.full-PL EMPH SENS-be
 8290 ‘(The eagle) ate them together with its fledglings and they ate to their
 8291 full.’ (huli yu shanying-zh, 28)

8 Postpositions and relator nouns

8292 A postpositional comitative phrase can also serve as a dual or plural possessor,
8293 as if from a complex noun phrase ‘X *c^ho* Y’ with elided Y element, as in (129).⁷
8294 See §9.2.1 for additional discussion.

- 8295 (129) *tce uu-rzaβ c^ho ndzi-me ci tu tce,*
LNK 3SG.POSS-wife COMIT 3DU.POSS-daughter one exist:FACT LNK
‘He and his wife have a daughter.’ (14-siblings, 313)

8297 The comitative is also used in the simultaneous action construction (§16.4.3,
8298 §24.4.3.2)

8299 8.2.6 Additive

8300 The additive adposition *ny*, possibly from Tibetan མ ‘locative’, appears after
8301 the protasis of some conditional clauses (§25.2.1), but it also occurs in direct adjac-
8302 ency between two nouns (generally identical ones), most commonly to express
8303 repeated action as in (130) and (131).

- 8304 (130) *ty-rpi ny ty-rpi zo puu-su-βzu-nu*
INDEF.POSS-sutra ADD INDEF.POSS-sutra EMPH IPFV-CAUS-make-PL
8305 *puu-ηu tce,*
SENS-be LNK
‘They ask (lamas) to chant sutras after sutras.’ (2003kandZislama, 112)

- 8307 (131) *tce uu-χti nuu kuu c^ha ntsuu ku-ts^{hi}*
LNK 3SG.POSS-companion DEM ERG alcohol always IPFV-drink
8308 *puu-ηu tce c^ha ny c^ha ku-ts^{hi} pjuu-cti tce*
PST.IPFV-be LNK alcohol add alcohol IPFV-drink IPFV-be.AFF LNK
‘Her husband used to drink all the time, drank alcohol again and again.’
8310 (17-lhazgron, 64)

8311 It can also be interpreted as gradual increase (132) and/or the meaning ‘all the
8312 way’ with locative nouns as in (133).

- 8313 (132) *tuu-ci nuu taŋ ny taŋ, taŋ ny taŋ tu-yi*
INDEF.POSS-water DEM up ADD up up ADD up IPFV:UP-come
8314 *pju-cti*
IFR.IPFV-be.AFF
‘The water was raising up and up.’ (31-deluge, 19)

⁷Note that (129) does not mean ‘There is his wife and their daughter’ (dual indexation would be expected on the verb).

- 8316 (133) *tṣu ny tṣu pjy-ce q^he,*
 path ADD path IFR:DOWN-go LNK
 8317 ‘He went all the way down.’ (140511 alading-zhn 105)

8318 The additive can also occur between finite verbs with a similar range of mean-
 8319 ings (§19.4), with numerals and counted nouns (§7.3.2.3) to express distributivity,
 8320 and with ideophones to describe a rhythmically occurring action (§10.1.2.3).

8321 8.2.7 Standard marker

8322 Japhug has several postpositions that are mainly used to mark the standard in the
 8323 comparative construction. The most common one is *syz* ‘compared with’, but the
 8324 variants *staz*, *sryzny*, *staṣny*, *sustaz* (117 in §15.1.5.5) *χtanγ* (68, §10.4.1) and *suxχta*
 8325 are also attested (see §5.8.4 concerning their etymology). Their relative frequency
 8326 appears to be speaker-dependent, and no meaningful difference could be detected
 8327 between them.

8328 In the comparative construction (§26.2.1), the comparee is the intransitive sub-
 8329 ject of the main verb (the parameter, generally an adjectival stative verb) and is indexed on the verb. The comparee is either in the absolutive or in the ergative
 8330 (§8.2.2.7). The standard is necessarily marked by one of the postpositions
 8331 listed above, and cannot be indexed on the main verb. Neither the standard nor
 8332 the comparee are required to be overt. An adjectival stative verb with a stan-
 8333 dard postpositional phrase as in (134) is a well-formed comparative construction.
 8334 Examples like (135) with overt comparee and standard are rarer.

- 8336 (134) *qandzyi sryzny nuu-wxti, qalias sryzny nuu-xtei*
 falcon COMP SENS-be.big eagle COMP SENS-be.small
 8337 ‘It is bigger than a falcon, and smaller than an eagle.’ (2011-08-kuwu,
 8338 40-41)
- 8339 (135) *wzo nuu azo syz tuu-xpa wxti*
 3SG DEM 1SG COMP one-year be.big:FACT
 8340 ‘She is one year older than me.’ (12-BzaNsa, 94)

8341 The standard marker *syz* (and its variants) also occurs in a construction ex-
 8342 pressing progressive increase throughout the time, where a time counted noun
 8343 like *tuu-syi* ‘one day’ or *tuu-xpa* ‘one year’ is followed by the standard marker and
 8344 then repeated, as *tuu-xpa syz tuu-xpa* ‘more year after year’ in (136). This construc-
 8345 tion, although attested in non-translated texts, is more common in texts from
 8346 Chinese, where it calques the construction 一年比一年 <yīnián bǐ yīnián> ‘more

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8347 year after year'. The more idiomatic Japhug construction to express the same
8348 meaning is through partial reduplication of the first syllable of the main verb
8349 (§12.4.1.4).

- 8350 (136) *nii-jwab nu, [...] tur-xpa sz tui-xpa lu-dyn yu*
 3PL.POSS-leaf DEM one-year COMP one-year IPFV-be.many be:FACT
 8351 *ma*
 LNK
 8352 ‘There are more needles (leaves) each year’ (08-saCW, 17)

8353 The standard markers can also be used with subordinate clauses (§25.6.2.3).
8354 The standard marker with the distal demonstrative *nuu srznr* has the meaning
8355 ‘rather than that, could ... as well’ as in (137).

This phrase can also be used as a scalar marker ‘even’ with scope over the following clause, as in (138), and occurs in incremental additive constructions ‘not only X, but also Y’ (§25.6.2.3).

- | | | | | | | |
|------|-------|--|-------------------------|----------------------|------------------|---------------------------|
| 8364 | (138) | <i>ki</i> | <i>kx-rtsi</i> | <i>kui-tu</i> | <i>me</i> | <i>ny, azo nui szsny,</i> |
| | | DEM.PROX | INF-count | SBJ:PCP-exist | not.exist:FACT | SFP 1SG DEM COMP |
| 8365 | | <i>nykinu,</i> | <i>k^ha</i> | <i>kui-qanu~nui</i> | <i>w-ηgu</i> | <i>zuu, nykinu,</i> |
| | | FILLER | house | SBJ:PCP-EMPH~be.dark | 3SG.POSS-inside | LOC FILLER |
| 8366 | | <i>tuu-cp^yβ</i> | | <i>kuβde-rzuy</i> | <i>ty-ky-lxt</i> | <i>nunuu</i> |
| | | INDEF.POSS-corpse | four-section | AOR-OBJ:PCP-release | DEM | |
| 8367 | | <i>ku-svlyyi-a</i> | <i>c^ha-a</i> | <i>cti</i> | <i>ny!</i> | |
| | | IPFV-combine-1SG | can:FACT-1SG | be.AFF:FACT | SFP | |
| 8368 | | '(What you ask) is nothing, I am even able to put together a corpse that | | | | |
| 8369 | | had been cut into four pieces in a dark house.' (140512 alibaba-zh, 170) | | | | |

8370 The phrase *nui syzny* is also used as a marker of adversative topic as in (139),
8371 where it can be replaced by the marker *zo* (§9.1.5.3).

- 8372 (139) *kuki sylanp^byn ki nuu sznyj nu-wxti wo tce k^ha*
DEM.PROX basin DEM.PROX DEM COMP SENS-be.big SFP LNK house
8373 *ju-nuu-tsum-a tce,*
IPFV-VERT-take-1SG LNK
8374 ‘This basin is really big, I will take it home.’ (150831 jubaopen, 22)

8.2.8 Exceptive

8376 The exceptive postposition *ma* ‘apart from’ and its reduplicated variant *muma*
8377 are not selected by any verb, and only used in adjunct postpositional phrases as
8378 in (140).

- 8379 (140) *kum ci muma nuuu tce znde uja zo cti*
door one apart.from DEM LNK wall completely EMPH be.AFF:FACT
8380 ‘Apart from one door, there are walls everywhere.’ (2011-11-kha, 40)

8381 The exceptive *ma* ‘apart from’ is used in particular in restrictive focus con-
8382 structions (§9.1.6.5).

8383 When the scope of the restrictive construction is on an entire clause rather
8384 than a single noun phrase, the clause is followed by the linker *ma* (homophonous
8385 with the exceptive) and an exceptive phrase limited to the demonstrative pro-
8386 noun *nuu* (here in resumptive use, coreferent with the entire preceding clause)
8387 and the postposition *ma*, as in (141). The first *ma* in this construction is not to be
8388 analyzed as the postposition: while it is possible to reduplicate the second one
8389 as in *ma nuu muma* (example 142), reduplication of the first *ma* is not attested.

- 8390 (141) *[azuy w-ca ra] ma nuu ma*
1SG.GEN 3SG.POSS-meat be.needed:FACT LNK DEM apart.from
8391 *kui-ra me*
SBJ:PCP-be.needed not.exist:FACT
8392 ‘I want its meat, and nothing else.’ (02-deluge2012, 14)

- 8393 (142) *tx-pytso kui-yywu zo ky-niicpuwz*
INDEF.POSS-child SBJ:PCP-cry EMPH INF-imitate
8394 *mx-spe-a ma nuu muma spe-a*
NEG-be.able[III]:FACT-1SG LNK DEM apart.from be.able[III]:FACT-1SG
8395 ‘I cannot imitate a baby crying, but apart from that I can imitate (all
animal sounds).’ (27-kikakCi, 143)

8.2.9 Terminative

The postposition *mrctsə* ‘until’ is used after noun phrases to indicate temporal (143) or locative (144) limit. It can be used in opposition with the egressive postpositions (see 154 in §8.2.10) or with *kókmuz* ‘only after’ (example 160 in §8.2.11).

- (143) *tr-pytsə* *kui-dxən* *nura tce, tui-pyrme,*
 INDEF.POSS-child SBJ:PCP-be.many DEM:PL LNK one-year.old
bnu-pyrme jamar mrctsə tui-nuu *ku-ts^{hi}-nuu.*
 two-year.old about until INDEF.POSS-breast IPFV-drink-PL
 ‘In (families where) children are many, (mothers) breastfeed (the
 children) until (they are) one or two years old.’ (140426 tApAtso
 kAnWBdaR, 13)
- (144) *aktu mrctsə yuu-ku-ta-lyt*
 east until CISL-IPFV:EAST-1→2-release
 ‘I come with you (see you off) until the (land of the) east.’ (28-smAnmi,
 220)

In combination with the demonstrative *nuu* ‘that’, *mrctsə* ‘until’ means ‘otherwise’, as in (145).

- (145) *ky-sxjø uja q^he, nuu-mtc^hi ky-xpjyt uja kui*
 INF-hear completely LNK 3PL.POSS-mouth INF-observe completely ERG
kú-wy-spa cti. nuu mrctsə mx-k^hui.
 IPFV-INV-be.able be.AFF:FACT DEM until NEG-be.possible:FACT
 ‘(In order to learn the Tshobdun language, since it has no writing
 system), one has no choice but to listen and observe people’s mouth to
 learn it, otherwise it is not possible.’ (150901 tshuBdWnskAt, 41-44)

With a verb in negative form, the terminative can express restrictive focalization of locative and temporal adjuncts (§9.1.6.5), as in (146).

- (146) *izora pxjk^hu <yiyue> <ershidouhao> mrctsə mítj-lxt-nuu k^hi.*
 1PL still January twentieth.plus until NEG:SENS-release-PL hearsay
 ‘(At) our (place), they will only have (vacations) on the twentieth
 something of January, they say.’ = ‘They won’t have (vacations) until the
 twentieth of January.’ (conversation, 14-12-24)

The terminative postposition *mrctsə* can also be used to build temporal subordinate clauses (§25.3.2.3).

8424 **8.2.10 Egressive**

8425 There are six egressive postpositions in Japhug, which are built by combining
 8426 the root *caŋ-*/*caŋ-* (among the words where *-aŋ* and *-oŋ* are in free variation; the
 8427 variant *caŋ-* is generalized in the orthography, see §3.5.1) with either the root of
 8428 locative relator nouns (§8.3.4) or orientation adverbs (§15.1.1.4) as shown in Ta-
 8429 ble 8.1. There is a one-to-one relationship between the orientations of these post-
 8430 positions and the six definite orientations found in verb morphology (§15.1.1.4).

8431 The egressive postpositions are mainly used with noun phrases of location
 8432 expressing length or height (147) or a reference point marking a limit (148). How-
 8433 ever, *caŋtaŋ* ‘up from’ and *caŋpa* ‘down from’ can also follow noun phrases re-
 8434 ferring to time reference or durations, as in (149, 150) or more generally any
 8435 quantity (151). No examples of these postpositions following finite subordinate
 8436 clauses have been found.

- 8437 (147) *turme tur-fsu caŋtaŋ tu-mbro my-cʰa.*
 people GENR.POSS-same.size up.from IPFV:UP-be.high NEG-can:FACT
 8438 ‘It cannot grow higher than a person.’(11-qarGW, 29)

- 8439 (148) *ma kuitcimke numutcu, akui ku-ru tce, praqwu caŋdi*
 LNK TOPO DEM:LOC east IPFV:EAST-look.at LNK TOPO west.from
 8440 *sy-mto, andi tce tce, cufco caŋkuu nuu sy-mto tce,*
 PROP-see:FACT west LNK LNK TOPO east.from DEM PROP-see:FACT LNK
 8441 ‘In Kuchimke, looking towards the east, (the areas) to the west of
 8442 Praqwu are visible, and in the west, (the areas) to the east of Shyufkyo
 8443 are visible.’ (150904 tshAcim, 30)

- 8444 (149) *kumŋysqyrzau caŋtaŋ cʰuu-mduu-nuu my-ŋgryl*
 fifty-day up.from IPFV-live.up.to-PL NEG-be.usually.the.case:FACT
 8445 *tu-ti-nuu puu-ŋu.*
 IPFV-say-PL SENS-be
 8446 ‘They cannot live more than fifty days, it is said.’ (26-GZo, 41)

- 8447 (150) *tce stu kui-dyn nuunu tuu-xpa [tuu-yjyn caŋtaŋ]*
 LNK most SBJ:PCP-be.many DEM one-year one-time up.from
 8448 *kui-ymutuuy puu-me*
 GENR-RECIP:meet PST.IPFV-not.exist
 8449 ‘At most, we would only meet once per year (we had no opportunity to
 8450 meet more than once a year).’ (12-BzaNsa, 42)

8 Postpositions and relator nouns

- 8451 (151) *wu-puu* *nunuχsum cantaš tu*
 3SG.POSS-young DEM three up.from exist:FACT
 8452 *múj-ŋgryl*
 NEG:SENS-be.usually.the.case
 8453 ‘It does not usually have more than three offsprings.’ (2011-08-kuwu, 14)

8454 The postposition *cantaš* ‘up from’ is by far more common than all the other
 8455 ones, and is often combined with a negative predicate in a comparative construc-
 8456 tion (meaning ‘at most, no more than ...’, §26.2.4, §26.4.3), as shown by (147), (149),
 8457 (150) and (151) above.

8458 In addition to the locational, temporal and quantitative meanings presented
 8459 above, *cantaš* ‘up from’ and *canpa* ‘down from’ can be used to refer to relative
 8460 age (down from the upper generation, up from the lower generation, as shown
 8461 in 152) or social status (up from the lowliest person, as in 153).

- 8462 (152) *ny-mu* *ny-wa* *ni canpa*, *a-ye*
 2SG.POSS-mother 2SG.POSS-father DU down.from 1SG.POSS-grandchild
 8463 *cantaš* *ty-ruandzanspa-nuu je!*
 up.from IMP-be.careful SFP
 8464 ‘Be careful, (all of you) from your parents (in the upper generation) to
 8465 my grandson (in the lower one).’ (conversation, 29-09-2020)
 8466 (153) *wortči zo* *βyyru ci* *cantaš zo* *ty-suu-ywuuwum-nuu* *tce*,
 please EMPH miller INDEF up.from EMPH IFR-CAUS-RECIP:gather-PL LNK
 8467 ‘Please gather (everybody), from the miller (the lowliest of servants) up
 8468 (to the highest ranking person).’ (2003 kandZislama, 174)

Table 8.1: Egressive postpositions

Postposition	Relator noun	Orientation adverb
<i>cantaš</i> ‘up from’	<i>wu-taš</i> ‘up, top’	
<i>canpa</i> ‘down from’	<i>wu-pa</i> ‘down, bottom’	
<i>canlo</i> ‘upstream from’		<i>alo</i> ‘upstream’
<i>cantči</i> ‘downstream from’		<i>atči</i> ‘upstream’
<i>cankuu</i> ‘east from’		<i>akuu</i> ‘east’
<i>canđi</i> ‘west from’		<i>andi</i> ‘west’

8469 The egressive postpositions can be used in contrast with the terminative *myčta*
 8470 ‘until’, as in (154).

- 8471 (154) *tua-mke can̥pa tce tce ki tua-myŋke*
 INDEF.POSS-neck down.from LNK LNK DEM.PROX INDEF.POSS-ankle
 8472 *myct̥sa kua-zyuut kua-rŋji pjua-ŋu ra.*
 until SBJ:PCP-reach SBJ:PCP-be.long IPFV-be be.needed:FACT
 8473 ‘(Tibetan clothes) have to be long (enough) so as to reach the ankle
 8474 down from the neck.’ (30-tWNga, 3)

8475 As other postpositional phrases, egressive phrases followed by demonstratives
 8476 (§9.1.2) mean ‘the person(s)/thing(s) from X’, with a locative (155) or temporal
 8477 (156) interpretation.

- 8478 (155) *izora kua, nyki, tsʰuβdum caylo nurɑ 'st̥tpa-pu'*
 1PL ERG FILLER TOPO upstream.from DEM:PL pl.n.-person
 8479 *tu-ti-j ŋu.*
 IPFV-say-1PL be:FACT
 8480 ‘We call the people (who live) in Tshobdun and further upstream
 8481 ‘Stotpa’.’ (23-tCAphW, 14)
- 8482 (156) *sqamnui-pyrme can̥pa nunu tua-cya tu-nysci*
 twelve-years.old down.from DEM GENR.POSS-tooth IPFV-exchange
 8483 *kʰuu*
 be.possible:FACT
 8484 ‘Those under twelve years old, their teeth can be replaced.’
 8485 (27-tWCGArgu, 58)

8486 The postposition *caylo* ‘upstream from’ is homophonous with, and historically
 8487 related to, the noun *caylo* ‘seating place’ (for old people and ladies) (§15.1.4.4).

8.2.11 Other temporal postpositions

8488 Apart from the locative, terminative and egressive postpositions, a certain num-
 8489 ber of specifically temporal postpositions are found in Japhug, including *cunŋgu*
 8490 ‘before’, *cimuma* ‘immediately after’, *kóŋmuuz* ‘only after’, *pčintčyt* ‘since’, *jvz* ‘when’
 8491 and *caypc̥i* ‘since’, ‘from ... on’. All can be used with noun phrases and subordinate
 8492 clauses; the latter use is studied in the section on temporal clauses (§25.3).

8493 The postposition *cunŋgu* ‘before’ is an ancient compound containing as first
 8494 element the *status constructus* of a root cognate to Tangut 繢²¹⁰⁴ *ši*^{1.10} ‘formerly,
 8495 before’ and the relator noun *w-ŋgu* ‘inside’ (§8.3.4) as second element. It contrasts
 8496 with *w-qʰu* ‘after’ (§8.3.5), and can follow a noun phrase referring to a point in
 8497

8498 time, as in the common expression *saxsui cuŋgu* ‘before lunch’ (with the noun
 8499 *saxsui* ‘lunch’), or a duration, as in (157) and (158). The latter example shows that
 8500 *cuŋgu* ‘before’ can be used to refer to events occurring *after* the current temporal
 8501 point of reference (in 158, before three days from the present in the story).

- 8502 (157) *t̪te sqamŋu-sŋi cuŋgu nautcu tce, nvki, nu-rlaš tce*
 that.is fifteen-day before DEM.LOC LNK FILLER AOR-disappear LNK
 8503 *nui-me puu-ŋu puu-ŋu, t̪e-heme nui,*
 AOR-not.exist PST.IPFV-be SENS-be girl DEM
 8504 ‘That is, fifteen days before, she had disappeared, that girl.’ (tWxtsa, 15)

- 8505 (158) *χsui-sŋi χsŋ-rzaš myctsa a-my-tx-tuu-ryru ra ma*
 three-day three-night until IRR-NEG-PFV-2-get.up be.needed:FACT LNK
 8506 *tce my-pʰyn nuura to-ti. matei teetʰa χsui-sŋi*
 LNK NEG-be.efficient:FACT DEM:PL IFR-say because later three-day
 8507 *χsŋ-rzaš cuŋgu uzo nuu-pʰyo pjy-ra lo*
 three-night before 3SG IPFV-flee IFR.IPFV-be.needed SFP
 8508 ‘(The rabbit) said ‘Don’t get up until three days and three nights (have
 8509 passed)’, because (the rabbit was buying time) and had to flee before (the
 8510 end of) these three days and nights.’ (140427 qala cho kWrtsgag, 30-31)

8511 The postposition *cuŋgu* ‘before’ however most commonly occurs with subor-
 8512 dinate clauses, and requires a finite verb in the Imperfective (§21.2.3, §25.3.2.1). It
 8513 is attested following personal pronouns, as in (159), *cuŋgu* ‘before’ refers to an
 8514 action concerning the referent of the pronoun, whose nature can be determined
 8515 from the context, as if the main verb of a subordinate clause had been elided.

- 8516 (159) *azō cuŋgu a-pi ra atu ryzi-nui tce, nunuara*
 1SG before 1SG.POSS-elder.sibling PL up.there stay:FACT-PL LNK DEM:PL
 8517 *yuu nu-rmi tx-z-myke qʰe,*
 GEN 3PL.POSS-name IMP-CAUS-be.first[III] LNK
 8518 ‘Before (you choose a name for) me, my elder brothers up there, (choose)
 8519 their names first.’ (Gesar, 124)

8520 The common adverb *kuačuŋgu* ‘in former times’ comes from the combination
 8521 of the *status constructus* of the proximal demonstrative *ki* ‘this’ (§6.9) with the
 8522 postposition *cuŋgu* ‘before’. The phrases *ki cuŋgu* ‘before this’ *nuu cuŋgu* ‘before
 8523 that’ with the demonstratives *ki* ‘this’ and *nuu* ‘that’ are also attested.

8524 While the neutral antonym of *cuŋgu* ‘before’ is the relator noun *u-qʰu* ‘after’
 8525 (§8.3.5), subsequent temporality can also be expressed by *cimuma* ‘immediately

8526 after' and *kó̤smuz* 'only after' (one of the rare uninflected words with a non-final
 8527 stress, §3.7). These postpositions are mainly attested following the demonstrative
 8528 pronoun *nū*, and often used adverbially as *nū cimuma* 'immediately' and *nū*
 8529 *kó̤smuz n̄y* 'only then', but are also attested with temporal and conditional clauses
 8530 (§25.3.3.2, §25.2.2) and with temporal counted nouns or adverbs as in (160), which
 8531 also illustrates the opposition between *kó̤smuz* 'only after' and the terminate
 8532 postposition *m̄ct̄ṣa* 'until' (§8.2.9).

- 8533 (160) *w-xso* *zNGuiłor nūnū, tce sqamju-xpa m̄ct̄ṣa w-mat*
 3SG.POSS-normal walnut DEM LNK fifteen-year until 3SG.POSS-fruit
 8534 *ku-ts^hob* *máj-c^ha.* *pú-wy-ji* *cimuma, w-ryi*
 IPFV-attach NEG:SENS-can AOR-INV-plant just.after 3SG.POSS-seed
 8535 *pjú-wy-ji* *w-q^hu,* *sqamju-xpa kó̤smuz n̄y w-mat*
 IPFV-INV-plant 3SG.POSS-after fifteen-year only.after LNK 3SG.POSS-fruit
 8536 *ku-ts^hob* *ŋu* *tu-ti-nū* *ŋgryl* *tce,*
 IPFV-attach be:FACT IPFV-say-PL be.usually.the.case:FACT LNK
 8537 'Usually, the walnut tree cannot have walnuts until fifteen years (have
 8538 passed). Just after one has planted it, after one plants its seeds, it is only
 8539 fifteen years later that it bears nuts, they say.' (12-ndZiNgri, 166-167)

8540 There is an adverb *nó̤smuz* 'only then' (found for instance in 60, §8.2.2.10)
 8541 whose meaning is identical to *nū kó̤smuz n̄y* 'only then', and apparently results
 8542 from the fusion of the demonstrative *nū* with the root *-o̤smuz*. The origin of the
 8543 *k-* element in *kó̤smuz* 'only after' is unclear; it could be the fused form of the
 8544 proximal demonstrative *ki* (§6.9.1).

8545 The postposition *p̄int̄ṣyt* 'since' (from Tibetan དྲྭ-କ୍ୟେ- *p̄hjin.t̄ṣad* 'thereafter') can
 8546 follow a date (161) or a subordinate clause, and is most often used with the rela-
 8547 tor noun *w-q^hu* 'after' to mean 'from that time on' as in (162). Another postposi-
 8548 tion, *caŋpc̄i* 'since', 'from ... on' (combining the *caŋ-* element found in egressive
 8549 postpositions §8.2.10 with *-pc̄i* from Tibetan དྲྭ- *p̄hi* 'later') can be used like *p̄int̄ṣyt*
 8550 'since' following *w-q^hu* 'after' as in (163), or after temporal clauses (§25.3.3.3). The
 8551 two postpositions *p̄int̄ṣyt* 'since' and *caŋpc̄i* 'since', 'from ... on' have the same
 8552 meaning, but the latter is considered by Tshendzin to be an influence from the
 8553 Xtokavian dialects (§6.5.1, §15.1.1.3).

- 8554 (161) *tce t^ham kuiβdesqi w-ro* *to-pa* *ma <liu.jiu.nian>*
 LNK now fourty 3SG.POSS-excess IFR-pass.X.years LNK 1969
 8555 *p̄int̄ṣyt*
 since
 8556 'Now it has been forty years (we have known each other), since 1969.'

8 Postpositions and relator nouns

- 8557 (12-BzaNsa, 13)
- 8558 (162) *tcizo pui-ari-tci* *ŋu*, *mts^huk^ha pui-ftcxt-tei* *ŋu*,
 1DU AOR:DOWN-go[II]-1DU be:FACT lake AOR-subdue-1DU be:FACT
 8559 *nua u-q^hu* *pcintctx tce, nua-vgra* *nua nua-me*
 DEM 3SG.POSS-after since LNK 2PL.POSS-enemy DEM AOR-not.exist
 8560 *ŋu*
 be:FACT
 8561 ‘We went down (into the lake), subdued the (demons in) the lake, and
 8562 from that time on, your enemy is no more.’ (Nyima.’Odzer2003.2,
 8563 109-110)
- 8564 (163) *tce t_y-mu* *nua, nua u-q^hu* *caŋpc*i** *zo*
 LNK INDEF.POSS-mother DEM DEM 3SG.POSS-after from.that.time.on EMPH
 8565 *ky-rundz_yq^hjuu* *ta-znuna*
 INF-eat.without.sharing AOR:3→3'-stop
 8566 ‘From that (time) on, the mother stopped to eat on her own without
 8567 sharing.’ (tWJo 2005, 53)
- 8568 The postposition *jyz* ‘when’ and its variant *jyzny* ‘when’ follows either subor-
 8569 dinate clauses (§25.3.4.1), temporal adverbs (164) or the noun *u-ŋgu* ‘beginning’
 8570 (from *ŋg* ‘go’ ‘head, beginning’) as in (164); it is not attested with other noun
 8571 phrases.
- 8572 (164) *jufcuar nutcu icq^ha* *tytcupu nuna*ra*, jufcuar*
 yesterday DEM:LOC the.aforementioned boy DEM:PL yesterday
 8573 *jyzny tu-ndze-a* *tce pui-ap*a** *wo ri*
 when IPFV-eat[III]-1SG LNK PST.IPFV-be.correct SFP LNK
 8574 ‘I should have eaten these boys yesterday.’ (160705 poucet5-v2, 36)
- 8575 (165) *tce u-ŋgu* *jyzny tce, u-mvlyjabs nura*
 LNK 3SG.POSS-beginning when LNK 3SG.POSS-limb DEM:PL
 8576 *mua-c^hui-p^hab-nua tce, tce nua yua u-ndzi* *kui-fsu~fse*
 NEG-IPFV-cut-PL LNK LNK DEM GEN 3SG.POSS-skin SBJ:PCP-EMPH~be.like
 8577 *nua pjua-qab-nua* *tce tce*
 DEM IPFV-remove.skin-PL LNK LNK
 8578 ‘In the beginning, they don’t cut off the limbs (from the cattle’s body),
 8579 and take out the skin (in such a way as to preserve its shape) exactly
 8580 like (that of the living animal).’ (06-BGa, 94)

8.3 Relator nouns

Relator nouns are inalienably possessed nouns (§5.1.2) used to mark the grammatical relations of oblique arguments or adjuncts. They differ from postpositions by at least three properties.

First, they have an obligatory possessive prefix, which is coreferent with the preceding noun phrase or clause when one is present (generally the third person singular *u-* prefix).

Second, unlike postpositions, which require at the very least a demonstrative (§8.2), they can occur without a preceding noun phrase or clause if the referent indicated by the possessive prefix is definite (including first or second person, as in 166) or generic (see example 59 in §5.1.3).

- (166) *juſeūr <gongxun> a-cki jɪr-ye.*
 yesterday ANTHR 1SG.POSS-DAT AOR-come[II]
 'Yesterday Gong Xun came to (see) me.' (160320, conversation)

Third, the genitive *yuu* (§8.2.3) can optionally occur between the preceding noun phrase and the relator (as in 167 below and 65), since relator noun phrases are a subtype of the possessive construction (§8.2.3.1).

- (167) *tce smyt tuimda rjylpu yuu u-cki nutcu, n̥kinu,*
 LNK TOPO TOPO king GEN 3SG.POSS-DAT DEM:LOC FILLER
u-rzaβ u-u-kui-t^hu c^hɪ-če tce,
 3SG.POSS-wife 3SG.POSS-SBJ:PCP-ask IFR:DOWNSTREAM-go LNK
 'He went to ask the king of the lower valley for (one his daughter to
 take as) a wife.' (2014-kWLAG, 16)

In addition, most relator nouns still preserve non-grammaticalized uses revealing their diachronic source, and some of them can be followed by the locative postpositions (§8.2.4.1) or by other relator nouns.

8.3.1 Dative

Two dative markers are attested in Japhug, *u-cki* and *u-p^he*; some speakers like Tshendzin prefer the former (as in 166, 168, 169), but most speakers I have recorded favor the latter (for instance, Kunbzang Mtsho who tells the story from which 170 is taken).

The dative can be followed by the locative postpositions *zū* and *tču*, as in (168), (174) and (177).

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- 8611 (168) *nua mbro tur-skyt kur-tso numuu u-cki*
 DEM horse INDEF.POSS-speech SBJ:PCP-understand DEM 3SG.POSS-DAT
 8612 *zuu to-ti*
 LOC IFR-say
 8613 ‘She said ... to the horse who could understand speech’
 8614 (2003kAndzWsqhaj, 25)

8615 The dative is used to mark the recipient or addressee. It occurs with indirective
 8616 verbs of speech such as *ti* ‘say’ (168, 169 and 170), *fçrt* ‘tell’ and *t^hu* ‘ask’ (171), and
 8617 also with some intransitive verbs of speech such as *ruçmi* ‘speak’ (172).

- 8618 (169) *icq^ha sruumuu nua kuu, [...] smynmimitov kucana*
 the.aforementioned râkshasî DEM ERG ANTHR ANTHR
 8619 *u-cki ‘nyzo tc^hi u-ruiy tui-ŋu’ to-ti ri,*
 3SG.POSS-DAT 2SG what 3SG.POSS-race 2-be:FACT IFR-say LNK
 8620 ‘The râkshasî asked Smanmi Metog Koshana, ‘What type of being are
 8621 you?’ (28-smAnmi, 378)
- 8622 (170) *tce ty-tceu nua kuu u-wa u-p^he nura*
 LNK INDEF.POSS-son DEM ERG 3SG.POSS-father 3SG.POSS-DAT DEM.PL
 8623 *pui-kui-fse nura to-ti pui-ŋu*
 AOR-SBJ:PCP-be.like DEM.PL IFR-say SENS-be
 8624 ‘The boy told his father the things that had happened.’ (qachGa2012, 175)
- 8625 (171) *nyzo u-my-pur-tui-stu ny, zara nua-cki ty-t^he*
 2SG QU-NEG-SENS-2-believe LNK 3PL 3PL.POSS-DAT IMP-ask[III]
 8626 *jyY*
 be.possible:FACT
 8627 ‘If you don’t believe it, ask them!’ (140508 shier ge tiaowu de
 8628 gongzhu-zh, 190)
- 8629 (172) *nua ty-pytso nua u-cki to-ruçmi.*
 DEM INDEF.POSS-child DEM 3SG.POSS-DAT IFR-speak
 8630 ‘It spoke to the child.’ (150831 renshen wawa-zh, 36)

8631 It also occurs with verbs of giving to mark the recipient as in (173) with the
 8632 verb *k^ho* ‘give, pass over’, but also the source as in (174) with verbs such as *rjo*
 8633 ‘borrow’, *symbi* ‘ask for’ and *χtu* ‘buy’ (§14.4.1, §17.2.5.7).

- 8634 (173) *u-nmas* *u-cki* *pj-k^ho* *tce*,
 3SG.POSS-husband 3SG.POSS-DAT IFR-give LNK
 8635 ‘She gave it to her husband.’ (qajdoskAt, 71)
- 8636 (174) *kui-ryrma* *ra nu-cki* *nuicu*, *kuxtco ci* *z-pj-rjo*,
 SBJ:PCP-WORK PL 3PL.POSS-DAT DEM:LOC basket INDEF TRAL-IFR-borrow
 8637 ‘(The snow leopard) borrowed a basket from the workers.’ (qala2002, 43)

8638 With the verb *k^ho* ‘give, pass over’ the recipient is more often encoded with the
 8639 genitive or a possessive prefix on the theme (§8.2.3.2) or with the semi-grammati-
 8640 calized noun *tu-jas* ‘hand’ (§8.3.6).

8641 The semi-transitive verb *ru* ‘look at’ can mark its goal with the dative, as in
 8642 (175); this is however optional, as this verbs also takes goals in the absolute
 8643 (§8.1.8) or locative (§8.2.4).

- 8644 (175) *tce txe nuu nuary-me* *tce, tce txe u-cki*
 LNK sun DEM APPL-be.afraid[III]:FACT-1SG LNK LNK sun 3SG.POSS-DAT
 8645 *bjja* *zo c-tu-ru* *tce, tuzo tu-cki* *maka*
 completely EMPH TRAL-IPFV:UP-look.at LNK GENR GENR.POSS-DAT at.all
 8646 *zo my-ru*
 EMPH NEG-look.at:FACT
 8647 ‘(If the yeti catches you), it is afraid of the sun, it looks at the sun the
 8648 whole time, and does not look at you.’ (140510 mYWrgAt, 13)

8649 The dative *u-cki* derives from a relator noun meaning ‘side’, ‘near’ or ‘at X’s
 8650 place’ (with or without motion). These locative meanings are still marginally
 8651 present in Japhug in examples like (166) above and (176), (177) and (178) below.

- 8652 (176) *u-rte* *nua u-rna* *u-cki* *pur-kui-nqob*
 3SG.POSS-hat DEM 3SG.POSS-ear 3SG-DAT AOR:DOWN-NMLZ:S/A-hang
 8653 *nunua pjx-mja* *tce u-ku* *u-tas to-ta*.
 DEM IFR:DOWN-take LNK 3SG.POSS-head 3SG-on IFR-put
 8654 ‘He took the hat that was hanging on his ear and put it on his head.’
 8655 (140505 liuhaohan zoubian tianxia-zh, 164)
- 8656 (177) *txe c^ho* *slxe zngri ra nuu-p^he* *nuicu* *ky-nycqa*
 sun COMIT moon star PL 3PL.POSS-DAT DEM:LOC INF-bear
 8657 *a-pui-tui-c^ha* *ra* *ma*,
 IRR-PFV-2-can.be.needed:FACT LNK
 8658 ‘(When you are) by the sun, the moon and the stars, you will have to
 8659 bear (the heat and the cold), otherwise...’ (2003kandZislama, 53)

8 Postpositions and relator nouns

- 8660 (178) *li t̪et̪u t̪r̪-ye qʰe, u-wa u-cki*
 again up.there AOR:UP-go[II] LNK 3SG.POSS-father 3SG.POSS-DAT
 8661 *ku-nu-ryzi, t̪eeki puu-ari qʰe, u-wuu*
 IPFV-AUTO-stay, down.there AOR-go[II] LNK 3SG.POSS-grand.father
 8662 *u-wi ni ndzi-cki ju-nu-ce qʰe,*
 3SG.POSS-grand.mother DU 3DU.POSS-DAT IPFV-AUTO-go LNK
 8663 ‘When she comes up there, she stays at her father’s house, and when she
 8664 goes down there, she goes to her grandparent’s place.’ (14-siblings, 305)

8665 8.3.2 Secutive

8666 The secutive relator noun *u-rca* ‘following’ is used with verbs of motion such as
 8667 *gi* ‘come’ to express the meaning ‘follow’, ‘come/go with’ as in (179).

- 8668 (179) *azo kuuny ny-rca yi-a cti*
 1SG also 2SG.POSS-following come:FACT-1SG be.AFF:FACT
 8669 ‘I am coming-going with you.’ (2011-05-nyima, 171)

8670 The secutive can have a meaning similar to that of the comitative adverb
 8671 (§5.8.1) ‘together with X’, as in (180).

- 8672 (180) *pynmawombyr yuu u-cryuu u-βyi u-rca*
 ANTHR GEN 3SG.POSS-bone 3SG.POSS-ash 3SG.POSS-following
 8673 *tsʰuunt̪hun zo ta-wum-nuu puu-ŋju*
 IDPH(II):neat EMPH AOR:3→3'-collect-PL SENS-be
 8674 ‘They collected all of Padma ’Od-’bar’s bones together with his ashes.’
 8675 (2005 Norbzang, 410)

8676 The secutive phrase can follow (180), or precede (181) the noun phrase it ac-
 8677 companies.

- 8678 (181) *tuu-jyyt̪ u-rca t̪r̪-se*
 INDEF.POSS-feces 3SG.POSS-following INDEF.POSS-blood
 8679 *cʰuu-nuu-lob*
 IPFV:DOWNSTREAM-AUTO-come.out
 8680 ‘(In the case of this disease), blood comes out together with the feces.’
 8681 (24-pGArtsAG, 117)

8682 With the indefinite possessor prefix *t̪r̪-rca* and *tuu-tuu-rca*, the secutive appears
 8683 in adverbial function with the meaning ‘together’ (example 23, §7.1.7), though in
 8684 examples such as (182) the form *t̪r̪-rca* retains its nominal status.

- 8685 (182) *cob numuu ty-ryku ty-rca ηu*,
 buckwheat DEM INDEF.POSS-crops INDEF.POSS-following be:FACT
 8686 *suijno maw.*
 grass not.be:FACT
 8687 ‘Buckwheat (belongs) with the crops, it is not a (type of) grass.’
 8688 (13-NanWkWmtsWG, 68)

8689 In addition, the unexpected focus marker *rca* (§26.1.1.4) and the epistemic
 8690 sentence final particle *rca* (§10.4.4) are historically related to the secutive.

8691 8.3.3 Deputative

8692 The relator noun *w-tsʰyt* has two meanings. First, it can serve as a deputative
 8693 relator noun ‘instead of, on behalf of’ as in (183) and (185). No verb selects this
 8694 relator noun.

8695 The deputative adjunct can correspond to the intransitive subject (as in 183,
 8696 with the verb *tu* ‘exist’), the transitive subject (as in 184, with *yujtsi* ‘support’) or
 8697 the object.

- 8698 (183) *nuzora yuu nuu-tx-sno kuu-fse*
 2PL GEN 2PL.POSS-INDEF.POSS-saddle SBJ:PCP-be.like
 8699 *w-tsʰyt nuu, tcizo yuu, tci-xcynndzu χsui-ldza*
 3SG.POSS-instead.of DEM 1DU GEN 1DU.POSS-twigs three-long.object
 8700 *puu-tu tce, nuunuu lx-nuu-βlur-tci cti wo*
 PST.IPFV-exist LNK DEM AOR-AUTO-burn-1DU be.AFF:FACT SFP
 8701 ‘Instead of a saddle like yours, we had three twigs, this is what we
 8702 burned.’ (Kunbzang 2003, 203)

- 8703 (184) *azo ny-tsʰyt, nyki, si nuu tu-yujtsi-a*
 1SG 2SG.POSS-instead.of FILLER tree DEM IPFV-support-1SG
 8704 *jyŋ*
 be.possible:FACT
 8705 ‘I can support the tree for you/instead of you (while you fetch it).’
 8706 (150830 afanti-zh, 136)

8707 The noun phrase headed by *w-tsʰyt* can be either an adjunct as in (183) and
 8708 (184), the object of the verb *βzu* ‘make’, or a nominal predicate with a copula as
 8709 in (185) and (186). In the latter case, to express the meaning ‘do to X instead of to
 8710 Y’, a biclausal construction ‘do to X, (X) is instead of Y’ is used as in (186).

- 8711 (185) *si maye tce tce numutcu tce, nu-si*
 tree not.exist:SENS LNK LNK DEM:LOC LNK 3PL.POSS-wood
 8712 *u-ts^hyt juu-ju*
 3SG.POSS-instead.of SENS-be
 8713 ‘(since) there are no trees, (dung) is used there to replace the firewood.’
 8714 (05-tamar, 10-11)
- 8715 (186) *nuu ty-nuu-ndym tce azo a-ts^hyt juu tce*
 DEM IMP-AUTO-take[III] LNK 1SG 1SG.POSS-instead.of be:FACT LNK
 8716 ‘Take these instead of me (as a compensation).’ (2003kAndzwsqhaj2, 141)

8717 The examples (184) and (186) also show that the relator noun *u-ts^hyt* ‘instead of’ can occur with a first or second person possessive prefix.

8719 Second, *u-ts^hyt* also means ‘with proper measure’, mainly occurring in adverbial function as in (187) or in collocation with the verb *βzu* ‘make’ in the sense
 8720 ‘do with proper measure’ as in (188).

- 8722 (187) *rkanγraŋ u-ts^hyt tsa juu-kuu-nyctsasli-a-nuu*
 ANTHR 3SG.POSS-proper.measure a.little IPFV-2→1-torture-1SG-PL
 8723 *raymaŋ ma*
 SFP SFP
 8724 ‘Rkangrang, don’t go over the top in your torturing of me (torture me
 8725 with proper measure), please?’ (Norbzang 2005, 245)
- 8726 (188) *u-ts^hyt tu-su-βzu-nuu müj-k^huu ma,*
 3SG.POSS-proper.measure IPFV-CAUS-make-PL NEG:SENS-be.possible LNK
 8727 *nuu-ky-k^ho nuu muu-t^ha-ckuit myctsä*
 AOR-OBJ:PCP-give DEM NEG-AOR:3→3'-eat.completely until
 8728 *tu-ndze nuu-cti.*
 IPFV-eat[III] SENS-be.AFF
 8729 ‘They cannot make (the monkey eat) with measure, as it continues
 8730 eating the (food) that is given to it until there is none.’ (19-GzW, 60)

8731 In some contexts as in (189), *u-ts^hyt* ‘proper measure’ in adverbial used is better
 8732 translated as ‘depending on the circumstances’.⁸

⁸This example is taken from a text describing goats and sheep; goats are called *ts^hyt* in Japhug, but it is clear from the context that *u-ts^hyt* cannot be the 3sg possessed form of this noun, though the two forms are indeed homophonous.

- 8733 (189) *tce numuu u-tṣʰyt* *numuu u-puu* *ci ci*
 LNK DEM 3SG.POSS-proper.measure DEM 3SG.POSS-young once once
 8734 *uṇuaz tu, ci ci tuu-rdoꝝ ma me tce*
 two exist:FACT once once one-piece apart.from not.exist:FACT LNK
 8735 *núndža juu-ŋu.*
 for.this.reason SENS-be
 8736 ‘This is why, depending on the circumstances, sometimes (the goat) has
 8737 two kids, sometimes only one.’ (05-qaZo, 28)

8738 The inalienably possessed noun *u-tṣʰyt* (at least in the meaning ‘proper mea-
 8739 sure’) is borrowed from ~~tsʰad~~ ‘measure, limit’. It occurs as second element in
 8740 the compound *xtrtsʰyt* ‘restraint of one’s appetite’(with the *status constructus* *xtr-*
 8741 of *tuu-xtu* ‘belly’).

8742 8.3.4 Locative relator nouns

8743 The dearth of specific locative postpositions (§8.2.4) other than the egressive ones
 8744 (§8.2.10) in Japhug is compensated by the existence of many relator nouns ex-
 8745 pressing various types of location, as shown in Table 8.2.

8746 As other relator nouns, they can follow noun phrases (including headless rela-
 8747 tive clauses), with the possessive prefix agreeing in person and number with the
 8748 preceding constituent, but can also occur on their own if the referent is definite,
 8749 as *u-tar* ‘on’ in (190) and (221) below.

- 8750 (190) *u-tar zuu kṣ-amdzui ny tṣ-lu pa-tcxt*
 3SG.POSS-on LOC AOR-sit LNK INDEF.POSS-milk AOR:3→3'-take.out
 8751 *juu-ŋu*
 SENS-be
 8752 ‘She sat on him and milked.’ (2005 Kunbzang, 81)

8753 8.3.4.1 The tridimensional system

8754 The first six nouns in Table 8.2 are derived from orientation adverbs (§22.2.6). The
 8755 vertical dimension relator nouns *u-tar* ‘on’ and *u-pa* ‘below’ are simply built by
 8756 adding a possessive prefix to the root of the adverb, while the other ones combine
 8757 the *status constructus* of the adverbial root (*lṣ-*, *tʰṣ-*, *kṣ-*, *ndṣ-* from *lo*, *tʰi*, *kuu* and
 8758 *ndi*, respectively) with a suffix *-cu*. This hexameric system comprising three pairs
 8759 of elements along three dimensions (vertical, fluvial, solar) is the same as found
 8760 in verbal morphological (§15.1.1.4) and also egressive postpositions (§8.2.10).

Table 8.2: Locative relator nouns in Japhug

Lexical origin	
<i>w-taʂ</i> ‘on, above’	<i>taʂ</i> ‘upwards’
<i>w-pa</i> ‘below, under’	<i>pa</i> ‘downwards’
<i>w-lrcu</i> ‘upstream of’	<i>lo</i> ‘upstream’
<i>w-tʰycu</i> ‘downstream of’	<i>thi</i> ‘downstream’
<i>w-kycu</i> ‘east of’	<i>kuu</i> ‘eastwards’
<i>w-ndycu</i> ‘west of’	<i>ndi</i> ‘westwards’
<i>w-ku</i> ‘top of’	<i>tu-ku</i> ‘head’
<i>w-qa</i> ‘bottom of’	<i>tr-qa</i> ‘paw, root’
<i>w-拜ri</i> ‘before, in front of’	
<i>w-qʰu</i> ‘after’, ‘behind’	
<i>w-ŋgu</i> ‘inside’	
<i>w-pci</i> ‘outside’	় pʰi ‘outside’
<i>w-rkuu</i> ‘side’	
<i>w-χcyl</i> ‘middle, center’	় d̪k̪il ‘middle’
<i>w-pyrtʰyβ</i> ‘between’	় bar ‘middle, between’
<i>w-tʰyβ</i> ‘between’	
<i>w-mju</i> ‘opening, edge, border’	
<i>w-ndo</i> ‘edge, border’	

8761 8.3.4.2 Other locative relator nouns

8762 Outside of the tridimensional system, other locative relator nouns also occur in
 8763 antithetic pairs, in particular *w-拜ri* ‘before, in front of’ vs. *w-qʰu* ‘after, behind’
 8764 (the latter also occurs as a temporal relator noun, cf §8.3.5), *w-ŋgu* ‘inside’ vs. *w-*
 8765 *pci* ‘outside’ and *w-mju* ‘opening, edge, border’ vs. *w-ndo* ‘edge, border’ or *w-qa*
 8766 ‘bottom’.

8767 A few of these relator nouns are borrowed from Tibetan, as indicated in Ta-
 8768 ble 8.2), but most of them are native Gyalrong words. In particular *w-拜ri* ‘before,
 8769 in front of’ is one of the very rare cases of a disyllabic word that has a cognate in
 8770 Tangut sharing both syllables (𢙁𢙁^{5416–567} ywə-rjir^{2.25–2.74} ‘before’).⁹ The rela-
 8771 tor noun *w-ku* ‘top of’ (as in 191) is transparently grammaticalized from the body
 8772 part *tu-ku* ‘head’.

⁹The syllable *拜r-* = 𢙁𢙁⁵⁴¹⁶ ywə^{2.25} may be a fossilized allomorph of *tu-ku* ‘head’ with a uvular as in the Stau cognate *拜ə* ‘head’.

- 8773 (191) *tctetu si ui-ku zuu qaliab yyzu tce,*
 up.there tree 3SG.POSS-top.of LOC eagle SENS:exist LNK
 8774 ‘Up there on the top of the tree there is an eagle.’ (140427 laoying mao he
 8775 yezhu-zh, 31)

8776 Some relator nouns other than *ui-ku* ‘top of’ have non-grammaticalized uses;
 8777 for instance *ui-ŋgu* ‘inside’ still occurs as a noun meaning ‘internal part, inside’
 8778 in (192).

- 8779 (192) *tce numuu kui-spor ŋu, ui-ŋguu nu*
 LNK DEM SBJ:PCP-have.a.hole be:FACT 3SG.POSS-inside DEM
 8780 *so tce*
 be.hollow:FACT LNK
 8781 ‘Its (inside) has a hole, its inside is hollow.’ (12-Zmbroko, 23)

8782 Some of the relator nouns above can derive verbs of location such as *m̥ku* ‘be
 8783 first’ and *m̥pc̥i* ‘be outside’ with the denominal prefix *m̥-* (§20.6).

8784 The meaning of the relator nouns *ui-mju* and *ui-ndo* requires a specific de-
 8785 scription. These nouns are not antithetic to another in all cases. The basic (non-
 8786 grammaticalized) meaning of *ui-mju* is the border of the opening or mouth of
 8787 a container / bag (193), or the shoreline (of a lake), as in (194). In this use, it is
 8788 opposed to *ui-qa* ‘bottom of’, as in (195).

- 8789 (193) *tcendyre numuu kʰutsa ui-mju jamar kui-wxti tu,*
 LNK DEM bowl 3SG.POSS-border about SBJ:PCP-be.big exist:FACT
 8790 ‘Some are about as big as the mouth of a bowl.’ (22-BlamajmAG, 130)

- 8791 (194) *tcendre pyxtciu nuu mtsʰu ui-mju nutcu ‘sut’*
 LNK bird DEM lake 3SG.POSS-border DEM:LOC IDPH.I:sound
 8792 *to-ti to-nur-łob.*
 IFR-say IFR:UP-AUTO-come.out
 8793 ‘The bird came out of the shore of the lake with a noise.’ (2014-kWLAG,
 8794 556)

- 8795 (195) *mtsʰu ui-qa zuu nyrwuu mx-kui-naχteuy ci*
 lake 3SG.POSS-bottom LOC jewel NEG-SBJ:PCP-be.similar INDEF
 8796 *yyzu tce,*
 exist:SENS LNK
 8797 ‘At the bottom of the sea, there is a jewel unlike any other.’ (2012
 8798 Kunbzang, 12)

8 Postpositions and relator nouns

8799 The basic meaning of *wu-ndo* includes ‘extremity’ (for instance, of a limb as in
 8800 196) and also ‘end’ in both the locative and temporal sense (197).

8801 (196) *wu-bar* *wu-ndo* *nura hanumi pui-pav.*
 3SG.POSS-wing 3SG.POSS-border DEM:PL a.little SENS-be.black
 8802 ‘The extremities of its wings are a bit black.’ (23-scuz, 133)

8803 (197) *wu-ndo* *tce maka kui-tu* *pui-me* *pui-ŋu tce,*
 3SG.POSS-border LNK at.all SBJ:PCP-exist IPPV-not.exist SENS-be LNK
 8804 ‘In the end, nothing is left.’ (04-xiaocunzhuang-zh, 63)

8805 In the case of clothes, *wu-ndo* refers to the lower opening (towards the feet), as
 8806 opposed to the collar, as in (198).

8807 (198) *tce nuu wu-ndz̥i* *nunuu pju-χtsyβ-nuu tce tce*
 LNK DEM 3SG.POSS-skin DEM IPFV-tan-PL LNK LNK
 8808 *tui-ŋga* *wu-ndo* *ri ku-lxt-nuu,*
 INDEF.POSS-clothes 3SG.POSS-border LOC IPFV-release-PL
 8809 *tui-ŋga* *wu-kuna,* *wu-pvlos* *wu-ku,*
 INDEF.POSS-clothes 3SG.POSS-collar 3SG.POSS-sleeves 3SG.POSS-top
 8810 *wu-ndo* *nura ku-lxt-nuu,* *tu-su-fskyr-nuu* *ŋu.*
 3SG.POSS-border DEM:PL IPFV-release-PL IPFV-CAUS-surround-PL be:FACT
 8811 ‘They tan its hide (of the otter) and put it on the lower opening of the
 8812 clothes, on the collar of clothes, the cuffs of the sleeves and the lower
 8813 opening, and make it around (these openings).’ (28-qapar, 96)

8814 A contrast between *wu-mju* and *wu-ndo* occurs in their uses as relator nouns,
 8815 indicating opposite extremities or sides. In the case of fields (as in 199), *wu-mju*
 8816 designates the higher side of the field (towards the mountain), while *wu-ndo* refers
 8817 to the side closer to the river (all arable lands in Gyalrong area lie in narrow
 8818 valleys).

8819 (199) *qazmbri nuu, tui-ji* *wu-ndo,* *tui-ji*
 vine DEM INDEF.POSS-field 3SG.POSS-border INDEF.POSS-field
 8820 *wu-mju* *nura aþyndundyt zo tu-łos*
 3SG.POSS-border DEM:PL everywhere EMPH IPFV:UP-come.out
 8821 *cti*
 be.AFF:FACT
 8822 ‘The vine, it grows everywhere, on both sides of the fields.’ (06-qaZmbri,
 8823 12)

8824 The relator noun *w-mju* can also designate the top extremity of stairs, as in
 8825 (200); for the lower side, either *wqa* ‘bottom’ or *wndo* can be used (the former
 8826 more commonly).

- 8827 (200) *cun̥gluy n̥ia r̥yskyl w-mju z̥ia na-ta jnu-ŋju*
 pestle DEM stairs 3SG.POSS-border LOC AOR:3→3'-put SENS-be
 8828 ‘He put the pestle on the top of the stairs.’ (tWJo 2005, 49)

8829 The superlative derivation (§5.7.9) can be applied to most locative relator nouns,
 8830 as *w-mjucumju* from *w-mju* in (201), where it means that the liquid completely
 8831 fills the bowl to the point of touching the border of its mouth, flowing out at the
 8832 slightest motion.

- 8833 (201) *tsʰa t̥y-wy-rku tce kʰutsa w-mjucumju stʰuci*
 tea AOR-INV-put.in LNK bowl 3SG.POSS-border:SUPERLATIVE so.much
 8834 *tu-zyuit mx-ra ma ky-ndo tce sy-cke*
 IPFV:UP-reach NEG-be.needed:FACT LNK INF-take LNK PROP-burn:FACT
 8835 ‘When one pours tea, it should not reach the limit of the mouth of the
 8836 bowl, otherwise it will be burning when one holds it.’ (elicited)

8837 In addition to the relator nouns described above, the inalienably possessed
 8838 noun *w-stu* ‘straight ahead’ is mainly used as an adverb, but can also serve as a
 8839 relator noun to indicate the goal of a motion verb as in (202).

- 8840 (202) *tce pʰabrgot ri li uzo w-stu zo jny-yi*
 LNK boar also again 3SG 3SG.POSS-straight EMPH IFR:WEST-come
 8841 *qʰe, cymurydu k̥y-lst mu-pjy-n̥z qʰe pʰabrgot jo-nur-ce.*
 LNK gun INF-release NEG-IFR.IPFV-dare LNK boar IFR-AUTO-go
 8842 ‘The boar came directly at him, but he did not dare to shoot and the boar
 8843 went away.’ (150829 phaRrgot, 8)

8844 8.3.4.3 The relator noun *w-taꝝ* ‘on, above’

8845 The relator noun *w-taꝝ* ‘on, above’ is mainly used to build locative adjuncts or
 8846 goals (see examples in §8.3.4.5), but it is also selected by a certain number of
 8847 verbs to mark an oblique argument.¹⁰

8848 The intransitive verb *atsa* ‘prick’ and its causative form *s̥ytsa* ‘prick, pierce’
 8849 encode the piercing object as intransitive subject and object, respectively. The

¹⁰The relator noun *w-taꝝ* is homophonous with the bare infinitive *w-taꝝ* of the verb *taꝝ* ‘weave’ (§16.2.2), as in example (198), §16.3.2, but the resemblance between the two forms is fortuitous.

8 Postpositions and relator nouns

8850 patient (the person or object being pricked) is encoded as an oblique argument
 8851 in *wi-taꝝ*; example (203) illustrates the intransitive verb *atsa* with a generic human
 8852 argument (§5.1.3).

- 8853 (203) *tce wi-ku kui-ymtcɔꝝ jui-ŋu tce, tu-taꝝ*
 LNK 3SG.POSS-head SBJ:PCP-be.pointy SENS-be LNK GENR.POSS-on
 8854 *ku-otsa tce jui-cui-mŋym.*
 IPFV-prick LNK SENS-CAUS-hurt
 8855 ‘(The fir needles) are pointy-headed, they prick people, it hurts.’
 8856 (08-tWrgi, 27)

8857 The intransitive verb *nqoꝝ* ‘hang’ has an additional volitional meaning of ‘grab,
 8858 lean on’, taking an object or person with both hands with body contact. It is
 8859 attested for instance to describe a person who has fallen in the water, reaching
 8860 for floating pieces of wood in order not to sink as in (204) or jumping on the
 8861 back of someone and grabbing her to prevent her from leaving (205). The object
 8862 or person being grabbed is marked with *wi-taꝝ*.

- 8863 (204) *nunu zmbriu nuu-kꝝ-χtꝝr nua wi-taꝝ kꝝ-nqoꝝ-nua*
 DEM ship AOR-OBJ:PCP-scatter DEM 3SG.POSS-on IMP-hang-PL
 8864 *ra*
 be.needed:FACT
 8865 ‘Grab the (pieces of the) ship that have been scattered.’ (2012 Norbzang,
 8866 32)
- 8867 (205) *turmuk^ha tce tulxt nuu wi-taꝝ ko-nqoꝝ tce*
 evening LOC second.sibling DEM 3SG.POSS-on IFR-hang LNK
 8868 ‘In the evening, he grabbed the second sister.’ (07-deluge, 47)

8869 Some stative verb also optionally select an oblique argument in *wi-taꝝ*, in par-
 8870 ticular to express a beneficiary/maleficiary with the verbs *pe* ‘be good’ and *ŋyn*
 8871 ‘be bad’, in the meaning ‘be good to X, be nice with, treat X well’ and ‘treat X
 8872 badly’, as in (206). The genitive can alternatively be used to mark the beneficiary
 8873 with these verbs (§8.2.3.2), but the meaning is rather ‘be advantageous’ or ‘be
 8874 harmful’ depending on polarity.

- 8875 (206) *maka zo wi-taꝝ muu-pjꝝ-pe-ndzi qhe,*
 at.all EMPH 3SG.POSS-on NEG-IPFV.IFR-be.good-DU LNK
 8876 *pjꝝ-ŋyn-ndzi*
 NEG-IPFV.IFR-be.bad-DU
 8877 ‘They did not treat him well, they treated him badly.’ (2014-kWLAG, 114)

- 8878 (207) *a-pi* *ra a-taʂ* *nur-tui-pe*
 1SG.POSS-elder.sibling PL 1SG.POSS-on 3PL.POSS-NMLZ:DEG-be.good
 8879 *pui-syre* *zo* *tce*
 PST.IPFV-be.ridiculous EMPH LNK
 8880 ‘My elder brothers treated me very well.’ (140501 tshering skyid, 46)

8881 The bipartite verb *stu,mbat* ‘try hard’ (§11.6.3) can also take a beneficiary in
 8882 *u-taʂ*, with the meaning ‘care about X and treat X well’ as in (208).

- 8883 (208) *nx-taʂ* *stu-a* *mbat-a* *zo* *cti*
 2SG.POSS-on try.hard(1):FACT-1SG try.hard(2):FACT-1SG EMPH be.AFF:FACT
 8884 ‘I will treat you well.’ (2005lobzang, 33)

8885 Other intransitive verbs selecting oblique arguments in *u-taʂ* include *nurçxt*
 8886 ‘slightly touch in passing’ (designating the object touched), *rpu* ‘bump on’ (§14.5.2)
 8887 and *ndzorʂ* ‘be attached’ (119, §18.5.5).

8888 The transitive verb *lyt* ‘throw, release’, when used as a light verb (§22.4) in
 8889 collocation with nouns expressing either objects, weapons or substances that are
 8890 thrown or that the subject hits people with, selects a phrase in *u-taʂ* to indicate
 8891 the recipient, as in (209) and (210). This recipient, although syntactically quite
 8892 different from an object or a semi-object, can however be relativized using the
 8893 object participle (§16.1.2.5).

- 8894 (209) *u-taʂ* *tui-mci* *pjúr-wy-lyt*
 3SG.POSS-on GENR.POSS-spit IPFV-INV-release
 8895 ‘If one spits on it,’ (08-qajAGi, 27)

- 8896 (210) *ɛjɔʂ* *ra nur-taʂ* *kuny kʂ-ari* *tce scoʂ-qʰu ci*
 servant PL 3PL.POSS-on also AOR:EAST-go[II] LNK ladle-back once
 8897 *tu-lyt*, *nur-ye* *tce tʂŋkʰut ci tu-lyt*
 IPFV-release AOR:WEST-come[II] LNK fist once IPFV-release
 8898 ‘Every time she went right she would hit the servants with the back of
 8899 the ladle, every time she went left she hit them with the fist.’ (2002
 8900 qaCpa, 143)

8901 In addition, the relator noun *u-taʂ* is required with some categories of nouns
 8902 in specific contexts.

8903 First, *u-taʂ* in combination with a noun designating a type of transport (boat,
 8904 car etc) can express the transportation used in a particular trip. With the verb *ce*
 8905 ‘go’ taking the orientation UPWARDS, the meaning is ‘to take (a boat, a car etc)’
 8906 as in (211).

- 8907 (211) *zembruu ui-taꝝ to-će tce jo-nuu-će*
 boat 3SG.POSS-on IFR:UP-go LNK IFR-VERT-go
 8908 ‘He took a boat and went back home.’ (150907 niexiaqian-zh, 140)

8909 The verb *łor* ‘come out’ with the orientation DOWNWARDS in combination with
 8910 *ui-taꝝ* expresses the meaning ‘take off (a boat, a car etc)’ as in (212); the relator
 8911 noun itself is neutral as to the type of location (static, motion from, motion to-
 8912 wards), a topic discussed in more detail in §8.3.4.5.

- 8913 (212) *zembruu ui-taꝝ pjy-łor-nuu*
 boat 3SG.POSS-on IFR:DOWN-come.out-PL
 8914 ‘They took off the boats.’ (140508 shier ge tiaowu de gongzhu-zh, 149)

8915 To designate the means of transportation used during the whole travel (as
 8916 opposed to the begin and end points of the travel as in 211 and 212), the relator
 8917 noun *ui-ŋgu* ‘inside’ can also be used (§8.3.4.4).

8918 The relator noun *ui-taꝝ* also occurs to refer to a written medium, as in (213).

- 8919 (213) *tce juysi ui-taꝝ tu-fcyt tce,*
 LNK book 3SG.POSS-on IPFV-tell LNK
 8920 ‘It is told in a book, that...’ (27-qaCpa, 5)

8921 8.3.4.4 The relator noun *ui-ŋgu* ‘inside’

8922 The relator noun *ui-ŋgu* ‘inside’ is only partially grammaticalized (§8.3.4.2). How-
 8923 ever, it is selected by a few verbs to mark an oblique argument, in particular the
 8924 goal of the transitive verbs *rku* ‘put in’ (§14.4.1) and *lyt* in the meaning ‘sow,
 8925 spread’ as in (214).

- 8926 (214) *khutsa ui-ŋgu tur-ci tu-rku-nuu tce,*
 bowl 3SG.POSS-inside INDEF.POSS-water IPFV-put.in-PL LNK
 8927 ‘People used to put water in a bowl, and...’ (29-mWBZi, 129)

- 8928 (215) *tur-ji ui-ŋgu zui tsʰyt ui-yli nuu*
 INDEF.POSS-field 3SG.POSS-inside LOC goat 3SG.POSS-manure DEM
 8929 *cʰúi-wy-lyt tce, tx-ryku wuma zo*
 IPFV:DOWNSTREAM-INV-release LNK INDEF.POSS-crops really EMPH
 8930 *tu-sype cʰa*
 IPFV-do.well can:FACT
 8931 ‘If one spreads goat manure on the fields, it can make the crops grow
 8932 really well.’ (05-qaZo, 33)

8933 It is also found in combination with motion verb to express the means of trans-
 8934 portation used during the whole travel, as in (216).

- 8935 (216) <*chuzu*> *w-ŋgu* *t^hw-ye-a* *tce*
 taxi 3SG.POSS-inside AOR:DOWNSTREAM-come[II]-1SG LNK
 8936 'I came on a taxi.' (2010-01-Dpalcan, 28)

8.3.4.5 Locative relator nouns and locative postpositions

8938 All locative relator nouns can be also used with the locative postpositions *zuu*, *ri*,
 8939 *t_ču* and the fused forms of the latter two with the demonstratives *nure* and *nut_ču*
 8940 (§8.2.4). Example (217) illustrates the use of *w-taꝝ* 'on, above' and *w-pa* 'below,
 8941 under' with the locative *ri* expressing both static position (with the existential
 8942 verb *tu* 'exist') and motion towards (with the verb *l_čt* 'throw', here specifically
 8943 meaning 'direct water').

- 8944 (217) *w-t^hycu* *mant^hi* *q^haŋgu* *nur kuu, n_čki, βya*
 3SG.POSS-downstream downstream water.trough DEM ERG FILLER mill
 8945 *w-pa* *ri* *tc^hwŋk^hyr tu tce, tc^hwŋk^hyr*
 3SG.POSS-under LOC water.wheel exist:FACT LNK water.wheel
 8946 *w-taꝝ* *ri* *c^hwi-l_čt tce, tc^hwŋk^hyr w-taꝝ*
 3SG.POSS-on LOC IPFV:DOWNSTREAM-release LNK LNK water.wheel
 8947 *nure ri βyrrn_čjwak kx-ti tu tce*
 DEM:LOC LOC blades OBJ:PCP-say exist:FACT LNK
 8948 'The inferior water trough – under the mill there is a water wheel – (the
 8949 water trough) directs (the water) onto that water wheel – on the water
 8950 wheel there are things called 'blades'. (06-BGa, 27-31)

8951 Example (218) illustrates *w-pa* 'below, under' with the locative *ri* expressing
 8952 motion from a place.

- 8953 (218) *w-t^hob* *w-pa* *ri tu-łob* *nura*
 3SG.POSS-earth 3SG.POSS-below LOC IPFV:UP-COME.out DEM:PL
 8954 *máij-c^ha*
 NEG:SENS-can
 8955 '(Its shoots) cannot come out from under the ground.' (15-babW, 45)

8956 Examples (219) and (190) above show the combination of *w-taꝝ* 'on, above' with
 8957 the locative *zuu*, also for static position and motion.

- 8958 (219) *χsyr k^hri u-tab zuu pjy-rvzi tce*
 gold bed 3SG.POSS-on LOC IFR.IPFV-stay LNK
 8959 *u-tu-γγχsruu pjy-saχaꝝ zo.*
 3SG.POSS-NMLZ:DEG-be.handsome IFR.IPFV-be.extremely EMPH
 8960 ‘He was sitting on the golden bed, very handsome.’ (2014-kWLAG, 409)

8961 The uses are attested with the locative *tcu*, as shown by (220) and (221). No clear
 8962 criterion accounting for the presence or absence of these locative postpositions
 8963 in combination with the relator nouns has been found.

- 8964 (220) *rjymts^hu yuu u-rkuu qambuit u-tab nautcu pjy-rvzi.*
 ocean GEN 3SG.POSS-side sand 3SG.POSS-on DEM:LOC IFR.IPFV-stay
 8965 ‘He stayed on the beach.’ (140511 xinbada-zh, 167)
- 8966 (221) *tce u-tab nautcu pyymuj tuu-spra nuu jy-χtvr.*
 LNK 3SG.POSS-on DEM:LOC feather one-handful IFR-scatter
 8967 ‘He scattered a handful of feathers on it.’ (28-smAnmi, 327)

8968 There is one case of a fossilized *zuu* locative (§8.2.4.1) with the relator noun
 8969 *u-ŋguu* ‘inside’, the form *u-ŋguuz* ‘inside, among’, which is used in particular to
 8970 single out an element for a group, in particular in a superlative construction (222)
 8971 (§26.4.1) or to describe an intermediate colour (with stative verbs, as in example
 8972 223).

- 8973 (222) *kyndzibi nuu-ŋguuz stu kur-xtci nunu ku ...*
 COLL:siblings 3PL.POSS-among:LOC most SBJ:PCP-be.small DEM ERG
 8974 *nuura ntsuu tu-ti pjy-ŋu.*
 DEM:PL always IPFV-say IFR.IPFV-be
 8975 ‘The youngest among the sisters was always saying ...’ (150828 donglang,
 8976 26)
- 8977 (223) *nuu u-mdob nuu aj ky-ti múa-j-spe-a ma*
 DEM 3SG.POSS-colour DEM 1SG INF-say NEG:SENS-be.able[III]-1SG LNK
 8978 *arpi u-ŋguuz kuny pyi kur-fse*
 be.green:FACT 3SG.POSS-inside:LOC also be.grey:FACT SBJ:PCP-be.like
 8979 ‘I cannot say its colour, it is somewhere between green and grey.’
 8980 (06-qaZmbri, 56)

8981 8.3.5 Temporal relator nouns

8982 Many temporal postpositions are found in Japhug (§8.2.10, §8.2.9, §8.2.11), and
 8983 temporal relator nouns are relatively fewer. The relator *wu-raŋ* ‘during, the time
 8984 when’ (from Tibetan རིང་ *riŋ* ‘long, during, when’) is very commonly used with
 8985 subordinate clauses (§25.3.4.1), but can also follow temporal adverbs and nouns,
 8986 as in (§224).

- 8987 (224) *χcitka wu-raŋ tce, tcendyre pya ra, nuu-kv-ndza maka*
 spring 3SG.POSS-during LNK LNK bird PL 3SG.POSS-OBJ:PCP-eat at.all
 8988 *cʰwu-me nuu-ŋu tce, tcendyre uu-tuu-mtsur*
 IPFV-not.exist SENS-be LNK LNK 3SG.POSS-NMLZ:DEG-be.hungry
 8989 *pjv-saxab zo nuu-ŋu,*
 IFR.IPFV-be.extremely EMPH SENS-be
 8990 ‘In spring, the birds’ food has gone out and (that crow) was extremely
 8991 hungry.’ (kJujmAlu, 6)

8992 The inalienably possessed noun *wu-r̥y*, whose basic meaning is ‘specific (and
 8993 predictable) time’ as (225) (see also §20.2.3), can be used as relator noun as in
 8994 (226) to mean ‘the exact time when’.

- 8995 (225) *wu-r̥y yyzu ma nykinu spikuku zo*
 3SG.POSS-specific.time exist:SENS LNK filler every.day EMPH
 8996 *nuu-mab*
 SENS-not.be
 8997 ‘(The rut) occurs at a specific time, not every day.’ (27-qartshAz, 155)
- 8998 (226) *tcendyre ui-fsaqʰe tce nuu wu-r̥y tce li*
 LNK 3SG.POSS-next.year LNK DEM 3SG.POSS-specific.time LNK again
 8999 *lo-yi*
 IFR:UPSTREAM-come
 9000 ‘It came back at exactly the same time the next year.’ (22-qomndroN, 46)

9001 There are two relator nouns that can be used as antonyms of the preposition
 9002 *cuŋgu* ‘before’ (§8.2.11), *wu-mpʰru* ‘after, following’ (from ཡུ- ‘*pʰro* ‘remnant’, in
 9003 particular in expressions such as བେ-ୱେ- ‘*dehi pʰror* ‘next, after that’) and *wu-qʰu*
 9004 ‘after’, which is also used for spatial relations (§8.3.4.2). These two nouns are
 9005 not synonymous. The former must be used in the expression *ci wu-mpʰru ci* ‘one
 9006 after the other’ (227), and means ‘next’ as in (228), and can follow a subordinate
 9007 clause, expressing temporal subsequence (§25.3.3.1), though most commonly a

8 Postpositions and relator nouns

- 9008 demonstrative pronoun such as *nuu* or *nunuu* referring to the previous clause is
 9009 used instead, as in (229).
- 9010 (227) *ci uu-mp^hru ci zo ko-nupor^h q^he lo-sui-ye.*
 one 3SG.POSS-after one EMPH IFR-kiss LNK IFR:UPSTREAM-CAUS-come
 9011 ‘(The mother) kissed (her children) one after the one and had them come
 9012 (inside the house).’ (160701 poucet2, 38)
- 9013 (228) *tce nuu uu-mp^hru tce tc^hi to-ti?*
 LNK DEM 3SG.POSS-after LNK what IFR-say
 9014 ‘What does it say next?’ (140522 Kamnyu zgo)
- 9015 (229) *tce tui-rdo^h p^hy-sat tce tceri nunuu uu-mp^hru tui-sla jamar*
 LNK one-piece IFR-kill LNK LNK DEM 3SG.POSS-after one-month about
 9016 *nunuu tui-ci uu-ta^h nu-tcu uu-zda nuu*
 DEM INDEF.POSS-water 3SG.POSS-on DEM:LOC 3SG.POSS-mater DEM
 9017 *lo-ce ny c^hy-yi, lo-ce ny*
 IFR:UPSTREAM-go LNK IFR:DOWNSTREAM-come IFR:UPSTREAM-go LNK
 9018 *c^hy-yi ny-car*
 IFR:DOWNSTREAM-come IFR-search
 9019 ‘(Someone) killed one of them, and after that, (the other one) flew along
 9020 the river searching for its mate for about one month.’ (22-qomndroN, 44)

9021 The locative relator *uu-q^hu* ‘after’ also has temporal uses, in particular to build
 9022 temporal subordinate clauses (§25.3.3.1), and it can also be used after noun phrases
 9023 as in the expression *saxsui uu-q^hu* ‘after lunch, afternoon’, or simply following a
 9024 demonstrative as in *nuu uu-q^hu* ‘after that’.

9025 Another originally locative relator noun has temporal functions: *uu-pyrt^hyβ* ‘the
 9026 middle of’, which is used after the demonstrative *nuu* to mean ‘in the meantime’
 9027 (230) and also occurs with temporal clauses with the meaning ‘while’.

- 9028 (230) *azo ku-ce-a tce z-nuu-saxjar-a nyu tce nuu*
 1SG IPFV:EAST-go-1SG LNK TRAL-SENS-delay-1SG be:FACT LNK DEM
 9029 *uu-pyrt^hyβ tce nuizo ra kuu c-puu-rla-nuu je tce*
 3SG.POSS-in.the.middle LOC 2PL PL ERG TRAL-IMP-untie-PL SFP LNK
 9030 *ly-tsum-nuu je*
 IMP:UPSTREAM-take.away-PL SFP
 9031 ‘I will go there and delay him_i, and in the meantime, you go there and
 9032 untie him_j, and take him_j away.’ (tWJo 2005, 37)

9033 8.3.6 Semi-grammaticalized relator nouns

9034 8.3.6.1 *tu-jas* ‘hand’

9035 The noun *tu-jas* ‘hand’ occurs with several verbs in fixed collocation, the recipi-
 9036 ent of the action being indexed by the possessive prefix on this noun.

9037 It is found with *k^ho* ‘give’ to express the meaning ‘hand over to’ as in (231) and
 9038 (232).

- 9039 (231) *n^hki* *t^htsu* *nui* *a-jas* *t^h-k^hym!*
 DEM:MEDIAL lamp DEM, 1SG.POSS-hand IMP:UP-give[III]
 9040 ‘Hand over to me (up here) that lamp.’ (140511 alading-zh, 122)

- 9041 (232) *kuki* *mbro* *ki* *n^h-jas* *pui-k^ho-j* *ηu*
 DEM.PROX horse DEM.PROX 2SG.POSS-hand IPFV-give-1PL be:FACT
 9042 ‘(If you succeed), we will give you this horse.’ (X1-qachGa, 62)

9043 The collocation of *tu-jas* with the intransitive verb *zyut* ‘reach, arrive’ means
 9044 ‘receive’ or ‘obtain’, as in (233). With the causative form *szyut*, the collocation
 9045 means ‘get’ (with volition and controllability) as in (234) – the recipient marked
 9046 by the possessive prefix on *tu-jas* is the same referent as the transitive subject of
 9047 the main verb.

- 9048 (233) *icq^ha* *t^htsu* *nui* *a-jas* *a-nui-zyut*
 the.aforementioned lamp DEM 1SG.POSS-hand IRR-PFV-reach
 9049 *ra*
 be.needed:FACT
 9050 ‘I have to obtain this lamp.’ (140511 alading-zh, 212)

- 9051 (234) *tc^hi* *ra* *na-suso* *zo* *nui*, *ui-jas*
 what PL AOR:3→3'-think EMPH DEM 3SG.POSS-hand
 9052 *ju-nui-sui-zyut* *pjy-c^ha*.
 IPFV-AUTO-CAUS-reach IFR.IPFV-can
 9053 ‘He was able to get whatever he wanted.’ (140508 benling gaoqiang de si
 9054 xiongdi-zh, 47)

9055 The collocation of the noun *tu-jas* ‘hand’ with the verb *yi* ‘come’ also means
 9056 ‘obtain’ or ‘find’, as in (235).

- 9057 (235) *jinde tce u-kui-sat koyla maye tce, nu*
 nowadays LNK 3SG.POSS-SBJ:PCP-kill completely not.exist:SENS LNK DEM
 9058 *qarma u-muj kuny tuu-jas máij-yi wo*
 crossoptilon 3SG.POSS-feather also GENR.POSS-hand NEG:SENS-come SFP
 9059 ‘Nowadays nobody kills crossoptilons, one cannot even get their
 9060 feathers (to use as ornaments).’ (23-qapGAmWmtW, 170)

9061 The noun *tuu-jas* ‘hand’ does not occur in metaphoric use outside of these col-
 9062 locations; it cannot be used in particular to mark any adjunct. Other noun-verb
 9063 collocations where an experiencer or a recipient is marked as possessor of the
 9064 noun are described in §22.4.

9065 8.3.6.2 Cause and beneficiary

9066 Two semi-grammaticalized inalienably possessed nouns can be used to express
 9067 beneficiaries: *u-n̥dža* ‘reason’ as in (236), and *u-sk̥yt* ‘speech, sound’ as in (237),
 9068 though the latter is very rare. These two nouns also take complement clauses
 9069 (§24.6.3.5, §24.6.3.2) instead of noun phrases.

- 9070 (236) *nyzo ny-n̥dža puu-ye-a cti*
 2SG 2SG.POSS-reason PST:DOWN-come[II]-1SG
 9071 ‘I came down (here) for you.’ (2003 tWxtsa, 32)
- 9072 (237) *pʰa kymjuu yuu kuu-pe yuu u-sk̥yt nūt̥cu*
 all TOPO GEN SBJ:PCP-be.good GEN 3SG.POSS-speech DEM:LOC
 9073 *to-βzu-nu puu-ŋu.*
 IFR-make-PL SENS-be
 9074 ‘People built it there for the benefit of all of Kamyu.’ (150904 tshAcim, 32)

9075 The noun *u-tʰurzi* ‘mercy’ (borrowed from Tibetan བྱତ୍ତୁ ར୍ଦେ: *tʰugs.rdzé* ‘compas-
 9076 sion’, also found in a collocation §22.4.3.3), occurs in a semi-grammaticalized
 9077 construction meaning ‘thanks to’, in combination with the ergative *kuu* as an in-
 9078 strumental adjunct (238), or in absolute form as a nominal predicate (239).

- 9079 (238) *puu-cʰa-a nuura nyj ny-tʰurzi kuu puu-cʰa-a*
 AOR-can-1SG DEM:PL 2SG 2SG.POSS-mercy ERG AOR-can-1SG
 9080 ‘I succeeded all thanks to you.’ (2011 04-smanmi, 112)

- 9081 (239) *ma jinde nura kui-fse ky-mts^hym mane tce,*
 LNK nowadays DEM:PL SBJ:PCP-be.like INF-hear not.exist:SENS LNK
 9082 *smyn u-t^hurzi umyx-ju ma*
 medicine 3SG.POSS-mercy PROB-be:FACT LNK
 9083 ‘Nowadays we do not hear about (this disease), probably thanks to the
 9084 medicine.’ (27-tWfCA1, 52)

9085 The noun *u-xçyt* ‘strength’ is also often used in instrumental adjuncts with
 9086 the ergative to express cause, as in (240).

- 9087 (240) *tx-zdury u-xçyt kuu pjuu-si cti,*
 INDEF.POSS-toil 3SG.POSS-strength ERG/INSTR IPFV-die be:AFF:FACT
 9088 ‘(The bee) dies of exhaustion.’ (26 GZo, 40)

9 The noun phrase

9.1 Noun modifiers and determiners

This section discusses all nouns modifiers and determiners except those involving subordinate clauses (relative and complement clauses, discussed in chapter 23 and §24.6, respectively).

9.1.1 Number

Japhug has two number markers, the dual *ni* and the plural *ra*. These clitics are not obligatory for non-singular arguments (even when these have human referents), and do not necessarily trigger plural or dual agreement on the verb (§14.6.1.1).¹

9.1.1.1 Dual

The dual *ni* is historically related to the numeral *knuz* (§7.1.1), but their relationship is synchronically opaque. It combines with the proximal and distal demonstratives *ki* and *nui* to form the dual demonstratives *kuni* and *nuni*, respectively (§6.9, §9.1.2).

There is no semantic restriction on the use of *ni*, it most often occurs with human referents (2, 5, 6, 7), but is also commonly attested with animals (3) inanimate objects (4), and placenames (1).

- (1) *pr̥cta cʰo rgumba ni ndzi-pyrtʰyβ ri ηu*
TOPO COMIT monastery DU 3DU.POSS-between LOC be:FACT
'It is between Prashta and the monastery.' (140522 Kamnyu zgo, 115)

The marker *ni* can appear with a noun phrase comprising two nouns (each with singular referents) linked by the comitative *cʰo* (§8.2.5) as in (1) and (2).

¹Cognates of these markers in Gyalrong languages and beyond are discussed in §14.8.1.

9 The noun phrase

- 9110 (2) *tce a-wuu c^ho a-bi ni pjur-tur-sat*
 LNK 1SG.POSS-grandfather COMIT 1SG.POSS-younger.sibling DU IPFV-2-kill
 9111 *mr-jyy*
 NEG-be.possible:FACT
 9112 ‘You cannot kill my grandfather and my younger brother.’ (2011-05-nyima,
 9113 133)

9114 The dual can follow the numeral *bnuz* ‘two’, as in (3). This combination is
 9115 however very rare (only 13 examples in the corpus out of hundreds of dual *ni*).
 9116 The opposite order (dual followed by numeral) is not grammatical.

- 9117 (3) *mbyyru nuu jla bnuz ni ndzi-t^hyβ ri*
 plough.beam DEM hybrid.yak two DU 3DU.POSS-between LOC
 9118 *nuu-ce tce*
 IPFV:WEST-go LNK
 9119 ‘The beam of the plough goes between the two hybrid yaks.’ (24-mbGo,
 9120 113)

9121 The adverb *vnasna* ‘both’ commonly co-occurs with dual, as in (4); . It is ex-
 9122 terior to the noun phrase, and must thus follow *ni* and all other postnominal
 9123 determiners.

- 9124 (4) *zay c^ho raβ ni vnasna zo vja ku-te nuu-ŋu*
 copper COMIT brass DU both EMPH verdigris IPFV-put[III] SENS-be
 9125 ‘Both copper and brass can get verdigris.’ (30-Com, 101)

9126 The dual can also be used with noun dyads (§9.2.2.2), as in (5).

- 9127 (5) *uu-mu uu-wa ni kuu nuu-z-nvja-ndzi q^he*
 3SG.POSS-mother 3SG.POSS-father DU ERG IPFV-CAUS-be.a.pity-DU LNK
 9128 ‘Her parents would not be parted from her.’ (14-siblings, 305)

9129 The third person dual pronoun *zvni* is build by combining the pronominal root
 9130 -zo- with the dual *ni* (§6.1), and is not attested in combination with the dual. The
 9131 first and second dual pronouns *tcizo* and *ndzizo*, do occur with the dual marker
 9132 as in (6), though examples are very rare.

- 9133 (6) *tcizo ni wuma zo puu-amumi-tci tce*
 1DU DU really EMPH PST.IPFV-be.in.good.terms-1DU LNK
 9134 ‘We were in harmony together.’ (140512 fushang he yaomo-zh, 85)

9135 Noun phrases with the dual *ni* are always correlated with a dual prefix on the
 9136 following noun in possessive constructions or with relator nouns, as in (1), (3)
 9137 and (7). Not a single example of a noun phrase in *ni* followed by a noun with
 9138 singular or plural possessive prefix is found in the corpus.

- 9139 (7) *wi-pi ni ndzi-sro& ko-ri tce*
 3SG.POSS-elder.sibling DU 3DU.POSS-life IFR-SAVE LNK
 9140 ‘He saved the life of his two brothers.’ (qachGa 2012, 139)

9141 The marker *ni* is not obligatory with dual referents, in particular when the
 9142 numeral *ɛmuz* ‘two’ is present. There are in particular intrinsically collective nouns
 9143 referring to a pair of individuals such as *ɛz̥y̥mi* ‘husband and wife’, which can
 9144 trigger dual indexation as in (8).

- 9145 (8) *kwicungw tce tce atu <qinghai> zngulob nutcu tce,*
 in.former.times LNK LNK up.there ANTHR ANTHR DEM:LOC LNK
 9146 *ɛjumbray ɛz̥y̥mi ci pjx-tu-ndzi tce,*
 dragon husband.and.wife one IFR.IPFV-exist-DU LNK
 9147 ‘In former times, in Qinghai, in the Mgolog area, there was a couple of
 9148 dragons.’ (150820 qaprANar, 44)

9149 Such examples are however rare in the corpus; dual indexation is most often
 9150 correlated with a dual marker on the corresponding noun phrase, if overt.

9151 The numeral *ɛmuz* ‘two’ without the dual also triggers dual indexation, as in
 9152 (9).

- 9153 (9) *suŋgw zu turme wuma zo kua-wxti ɛmuz tu-ndzi tce*
 forest LOC person really EMPH SBJ:PCP-be.big two exist:FACT-DU LNK
 9154 ‘In the forest, there are two giants.’ (140428 yonggan de xiaocaifeng-zh,
 9155 172)

9156 Dual marking on a noun phrase is not necessarily correlated with dual inde-
 9157 xation on the verb, especially, but not exclusively, with inanimate referents, as
 9158 in (10) (§14.6.1.1).

- 9159 (10) *wi-mplav χc^ho& ni to-mto.*
 3SG.POSS-eye left.and.right DU AOR-have.sight
 9160 ‘His left and right eyes recovered sight.’ (140517 mogui de jing-zh, 105)

9161 However, a noun phrase with *ni* is never correlated with a plural indexation
 9162 marker on the verb. Apparent exceptions are either speech errors, or cases of
 9163 ambiguous indexation, as in (11).

9 The noun phrase

- 9164 (11) *ny-pi ni kuu nyzo nuryi kr-suso kuu bmas*
 9165 2SG.POSS-elder.sibling DU ERG 2SG come.back:FACT INF-think ERG soldier
 9166 *χsui-ttxur kuu pa-z-nyk^har-nu cti tce,*
 9167 three-round ERG AOR:3→3'-CAUS-surround-PL be.AFF:FACT LNK
 'Your two elder brothers, thinking that you are coming back, had (the
 9168 palace) guarded on all sides by three rows of soldiers.' (qachGa2012, 157)

9168 Example (11) is not completely straightforward, and deserves a detailed com-
 9169 ment. The form *paznyk^harnu* can be parsed as either *pui-az-nyk^har-nu* PST.IPFV-
 9170 PROG-surround-PL 'They were guarding it' with vowel fusion (§12.3) or *pa-z-nyk^har-*
 9171 *nu* AOR:3→3'-CAUS-surround-PL '(He/they) had them guard it'. Context makes it
 9172 clear here that the second option is the correct one, in particular because in the
 9173 same passage in another version of the same story, we find the verb *pa-su-lvt*
 9174 (AOR:3→3'-CAUS-release) 'he had (them) make' with the perfective 3→3' form of
 9175 a causative verb (Jacques 2016a: 242, §17.2.1). Moreover, while the phrase *ny-pi*
 9176 *ni kuu* 'your two elder brothers' could in principle belong to the infinitival clause
 9177 in *kr-suso*², it is clear from the context and the explanations provided by native
 9178 speakers that *ny-pi ni kuu* is the causer, and *bmas χsui-ttxur kuu* 'three rows of
 9179 soldiers' is the causee (also marked by the ergative, see §8.2.2.6).

9180 We thus observe plural indexation *-nu* on the main verb *pa-z-nyk^har-nu*, while
 9181 the subject *ny-pi ni kuu* has a dual marker. However, this is neither a counterex-
 9182 ample to the number indexation rule stated above, nor a speech error: rather, it
 9183 is a consequence of the fact that causees rather than causers can trigger number
 9184 indexation on the verb.

9.1.1.2 Plural

9185 The plural marker *ra*, like the dual, follows the noun and most of its modifiers, and
 9186 fuses with the demonstratives *ki* and *nu* to build the plural demonstratives *kura*
 9187 and *nura*, respectively (§6.9, §9.1.2). It should not be confused with the auxiliary
 9188 verb *ra* 'be needed', 'be necessary' (§24.5.3.1), though there are cases where some
 9189 ambiguity may occur.

9190 Like the dual *ni*, the plural *ra* is compatible with both animate and inanimate
 9191 referents, as in (12) and (13). It can be a plain marker of plurality as in (12).

²Incidentally, note that this infinitival clause contains another complement in Hybrid Reported Speech (§24.2.5.2).

- 9193 (12) *kumas si ra c^ho nuu-mdor my-naχtcay*
 other tree PL COMIT 3PL.POSS-colour NEG-be.the.same:FACT
 9194 ‘Its colour is different from that of the other trees.’ ((this tree) and other
 9195 trees, their colours are different) 11-qrontshom, 56)

9196 The marker *ra* is also often a similative plural (Mauri & Sansò 2018), under-
 9197 standable as ‘and other things’, ‘all kinds of’ as in (13).

- 9198 (13) *rdystab ra pjui-tṣaβ-nuu q^he turme tu-xtsuyj nuu-γu*
 stone PL IPFV-cause.to.fall-PL LNK people IPFV-hit SENS-be
 9199 ‘(Goats and sheep, as they climb high) cause stones (and other things) to
 9200 fall and these hit people.’ (tshAt-qaZo-kAlAG, 4)

9201 The plural can follow numerals (even without head noun) to express an ap-
 9202 proximative number, as in (14).³

- 9203 (14) *ci ci χsum kuβde ra juu-lx tuu-ηgryl tsuku tce*
 one one three four PL SENS-throw SENS-be.usually.the.case. some LNK
 9204 *εnuaz jamar ma mūj-lx,*
 two about apart.from NEG:SENS-throw
 9205 ‘Sometimes (dogs) have three or four (litters), some only have two.’
 9206 (05-khWna, 22)

9207 The plural marker *ra* can also indicate approximate location, with or without
 9208 locative markers. In (15), we find approximate location *ra* in *k^ha ra* ‘(everywhere)
 9209 in the house, around the house’ and *tu-ji u-ngu ra* ‘in the fields’, and in (16) with
 9210 body parts.

9211 This use of *ra* can convey a meaning of distributed location, and is often com-
 9212 bined with the adverb *abvndundyt* ‘everywhere’ (§6.7). It is reminiscent of plural
 9213 markers in Kirghiz and Old Japanese, which combine collective, hypocoristic and
 9214 approximate locative meanings (Antonov 2007: 195).

- 9215 (15) *βzur nuu wuma zo ηyn tce, tcendyre abvndundyt zo*
 mouse DEM really EMPH be.evil:FACT LNK LNK everywhere EMPH
 9216 *k^ha ra c^hui-rypu. tuu-ji u-nguu ra*
 house PL IPFV-bear.young INDEF.POSS-field 3SG.POSS-inside PL
 9217 *c^hui-rypu,*
 IPFV-bear.young
 9218 ‘The mouse is fierce, it has pups everywhere in the house, and has pups
 9219 in the fields.’ (27-spjaNkW, 166)

³Note that in (14) *ci ci* is the expression for ‘sometimes’ (§22.2.1), not used as a numeral.

9 The noun phrase

- 9220 (16) *nua-βri* *ra nua-lob*, *nua-mke* *nura* *nua-lob*
 3PL.POSS-body PL IPFV-come.out 3PL.POSS-neck DEM:PL IPFV-come.out
 9221 *nua-ŋja* *ra bryβbryβ* *zo* *nua-lob*
 3PL.POSS-face PL IDPH(II):covered.by.tiny.bumps EMPH IPFV-come.out
 9222 *nua-ŋju*.
 SENS-be
 9223 ‘(People who suffer from this disease have little blisters) appearing on
 9224 their body, on their neck and all over their face.’ (27-kharwut, 58)

9225 The marker *ra* even occurs with referents which are clearly singular, not only
 9226 in the approximative location function, but also in examples such as (17) where
 9227 the reason for the presence of *ra* is less immediately obvious. In (17), a sentence
 9228 taken from the translation of Rotkäppchen into Japhug (however, the presence
 9229 of *ra* cannot be due to calque since there is no plural marker in the original), the
 9230 function of the plural on the phrase *tx-wi ra* ‘the grandmother’ is more subtle:
 9231 it conveys the idea that the impersonation takes on several aspects of the
 9232 grandmother, not only her physical appearance, but also her voice, as implied by
 9233 the second clause.

- 9234 (17) *qapar nua kuu li*, [...] *tx-wi* *ra to-nuəcpuz*
 dhole DEM ERG again INDEF.POSS-grandmother PL IFR-impersonate
 9235 *tce, tce u-skxt* *ra cʰy-sui-ymtcoə* *zo* *tce nura to-ti*.
 LNK LNK 3SG.POSS-voice PL IFR-CAUS-be.sharp EMPH LNK DEM:PL IFR-say
 9236 ‘The wolf was pretending to be the grandmother, and said these (words)
 9237 with a sharp voice.’ (140428 xiaohongmao-zh, 95-96)

9238 Just like noun phrases with dual *ni* correlate with dual possessive prefixe (see
 9239 7 in §9.1.1), those with plural *ra* can only be coreferent with a plural possessive
 9240 prefix, as *nua-* in (18).

- 9241 (18) *sukku tce tʰye kuu-fse*, *kumab si ra nua-mat* *nura*
 tree LNK acorn SBJ:PCP-be.like other tree PL 3PL.POSS-fruit DEM:PL
 9242 *c-pjua-nua-pʰuit* *tce tu-ndze* *nua-ŋju*.
 TRAL-IPFV:DOWN-AUTO-pluck LNK IPFV-eat[III] SENS-be
 9243 ‘On the trees, (the bear) plucks acorn or fruits from other trees to eat.’
 9244 (21-pri, 44)

9245 Apparent counterexamples such as (19), where *ra* is followed by a noun with
 9246 the singular possessive prefix *u-*, occur when the preceding noun phrase is not

9247 the possessor of the following noun. For instance, in (19) *ra* has the vague locative
 9248 function, and the phrase *tui-ŋga ui-taꝝ ra* ‘on the clothes’ is not the possessor of
 9249 *ui-mat* ‘its fruits’, it is a locative adjunct.

- 9250 (19) *tui-ŋga ui-taꝝ ra ui-mat bꝫbꝫβ*
 9251 INDEF.POSS-clothes 3SG.POSS-on PL 3SG.POSS-fruit IDPH(II):in.clusters
 9252 *zo ku-ndzorꝝ.*
 EMPH IPFV-ANTICAUS:attach
 9253 ‘Its seeds attach on clothes in clusters.’ (18-qromJoR, 169)

9253 The plural *ra* very commonly occurs with headless relatives, with or without
 9254 a demonstrative, as in (20), where we find both relatives followed by *nunura* and
 9255 another one followed by *ra*.

- 9256 (20) *[kꝫ-ti my-kui-pe kui-fse tu-kui-ti]*
 9257 INF-say NEG-NMLZ.S/A-be.good NMLZ.S/A-be.like IPFV-NMLZ.S/A-say
 9258 *nunura tce, [[kꝫ-nutsu kui-ra] ra kumꝫ*
 9259 DEM:PL LNK INF-hide NMLZ.S/A-be.needed PL also
 9260 *tu-kui-ti] nunura, turme ra kumꝫ, tcayi tu-syrmi-nu*
 9261 IPFV-NMLZ.S/A-say DEM:PL people PL also parrot IPFV-call-PL
 9262 *ŋgryl.*
 be.usually.the.case:FACT
 9263 ‘Those who say things that one should not say, who say even what
 9264 should be concealed, even (if they are) people, they call them ‘parrots’.
 9265 (24-qro, 125)

9263 The plural *ra* also occurs between auxiliaries and the preceding complement
 9264 clause with a verb in finite (21) or non-finite (22) form, with a vague implication
 9265 that additional related actions are concerned.

- 9266 (21) *li tur-ji ui-ŋguu ra yui-ku-nuru ra*
 9267 again INDEF.POSS-field 3SG.POSS-inside PL CISL-IPFV-eat.crops PL
 9268 *ŋgryl.*
 be.usually.the.case:FACT
 9269 ‘It also (usually) comes to eat crops in the fields.’ (24-ZmbrWpGa, 37)
- 9269 (22) *yymdzu tce nunuu ky-nyjaꝝ ra my-sy-nyz tce*
 9270 be.thorny:FACT LNK DEM INF-touch PL NEG-PROP-dare:FACT LNK
 9271 ‘It is thorny and one does not dare to touch it with the hand.’
 (11-qrontshom, 91)

9 The noun phrase

9272 The marker *ra* following a locative noun or adverb can have the meaning ‘the
9273 people/things from X’, as in (23), without the need to add a demonstrative (cf 39
9274 §9.1.2).

- 9275 (23) *alo ra nui-mbyom-nui q^he*
 upstream PL SENS-be.in.a.hurry-PL LNK
9276 ‘Those in the village, they (do things) in hurry’ (conversation140510
9277 tshering, 175)

9.1.1.3 Honorific plural

9279 The plural marker *ra* is also used as a honorific marker on terms of address as
9280 *a-zi ra* ‘my young lady’ in (24), correlating with the plural possessive prefix *nui-*
9281 and sometimes plural indexation (§14.6.1.2).

- 9282 (24) *a-zi ra nui-<bandeng> nui-car-a ci azo*
 1SG.POSS-young lady PL 3PL.POSS-seat IPFV-look.for-1SG QU 1SG
9283 *tu-ozgrui-a ma*
 IPFV-bend-1SG LNK
9284 ‘Young lady, should I look for a seat for you, or bend down (for you to sit
9285 on my back)?’ (2003 Kunbzang, 41)

9286 The honorific function of plural number is also attested with the pronoun *nuzo*
9287 (§6.1.1).

9.1.2 Demonstratives

9288 Japhug demonstrative determiners are formally identical to the demonstrative
9289 pronouns (§6.9). They distinguish between proximal and distal demonstratives
9290 with different roots, and fuse with the dual and plural markers studied in §9.1.1;
9291 the proximal *ki* undergoes change to *kui-* in those fused forms.

9292 As with the demonstrative pronouns, there are three sets of demonstratives,
9293 the base form, the reduplicated one (obtained by reduplicating the first syllable),
9294 and the emphatic one, with added *u-* prefix. Note that the latter two sets are
9295 not attested in the dual for determiners in the corpus, but the forms exist and
9296 are easily deducible from the corresponding plural ones. In addition, there is a
9297 medial demonstrative *nyki* which occurs in prenominal position.

9298 In Japhug, as in other Gyalrong languages, demonstrative determiners can be
9299 either/both pre- and postnominal as shown by an example such as (25), with the
9300 proximal *ki* both before and after the noun *srunlospuu* ‘little ring’.

Table 9.1: Demonstrative determiners

	Base form	Reduplicated	Emphatic
PROX.SG	<i>ki</i>	<i>kuki</i>	<i>wukuiki</i>
DIST.SG	<i>nū</i>	<i>nūnū</i>	<i>wnūnū</i>
PROX.DU	<i>kuni</i>	(<i>kukuni</i>)	(<i>wukukuni</i>)
DIST.DU	<i>nuni</i>	<i>nūnūni</i>	(<i>wnūnūni</i>)
PROX.PL	<i>kuura</i>	<i>kukura</i>	<i>wukukura</i>
DIST.PL	<i>nura</i>	<i>nūnūra</i>	<i>wnūnūra</i>
MEDIAL	<i>n̥ki</i>		

- 9302 (25) *azō yui-caβ-a t̥-nū tce, ki sruanlob-pw ki*
 1SG INV-catch.up:FACT-1SG AOR-be LNK DEM.PROX ring-DIM DEM.PROX
 9303 *nūr-ct^huz-a tce,*
 IPFV:WEST-turn.toward-1SG LNK
 9304 ‘When (the rākshasas) will be about to catch up with me, I will turn this
 9305 little ring towards west (in their direction).’ (28-smAnmi, 222)

9306 All possible combinations of base demonstratives (B) and reduplicated demon-
 9307 stratives (R) are attested as pre- or postnominal determiners:

- 9308 • BNB: *ki N ki, nū N nū* (25)
 9309 • RNB: *kuki N ki, nūnū N nū* (26)
 9310 • BNR: *ki N kuki, nū N nūnū* (28)
 9311 • RNR: *kuki N kuki, nūnū N nūnū* (27)

9312 The types BNB and RNB, with the postnominal determiner as a base demon-
 9313 strative, are by far the most common ones in the corpus.

- 9314 (26) *azō kuki t̥y̥pi ki lu-n̥yk^huk^hruit-a tce*
 1SG DEM.PROX staff DEM.PROX IPFV:UPSTREAM-drag-1SG LNK
 9315 ‘I will drag along this staff (on the ground).’ (2003 Kunbzang, 225)

9 The noun phrase

- 9316 (27) *icq^ha* *kuk*i** <*qingjiao*> *kuk*i** *tce, n*u*-qa*
 the.aforementioned DEM.PROX plant.name DEM.PROX LNK 3SG.POSS-root
 9317 *k*u*-wyrum* *j*u*-*ηu*.*
 SBJ:PCP-be.white SENS-be

9318 ‘This (plant that is called) *qingjiao* (in Chinese), its root is white (unlike
 9319 the other *qingjiao* whose root is red).’ (17-ndZWnW, 81)

- 9320 (28) *ki* *rg^ytpu* *kuk*i** *k*u*, icq^ha,* *qazo* *n*u**
 DEM.PROX old.man DEM.PROX ERG the.aforementioned sheep DEM
 9321 *to-mts^hi* *q^he, li* *t^ʂu* *k*u*-wxti* *n*u*tcu* *jo-ce* *tce,*
 IFR-lead LNK again road SBJ:PCP-be.big DEM:LOC IFR-go LNK
 9322 ‘The old man, leading the sheep, went to the big road.’ (150822 laoye
 9323 zuoshi zongshi duide-zh, 101)

9324 The emphatic form is very rare prenominally. In (29), prenominal *ukuk*i** occurs
 9325 to put contrastive focus on the noun to avoid potential confusion with the subject
 9326 of the sentence (‘this wife of mine, not his wife’).

- 9327 (29) *n*u* n*u*-rzaβ* *n*u* k*u*, uku*k*i*** *a-rzaβ* *kuk*i*,*
 DEM 3SG.POSS-wife DEM ERG DEM.PROX.EMPH 1SG.POSS-wide DEM.PROX
 9328 *kuk*i** *ckom* *ki* *na-sui-γβzu* *tce,*
 DEM.PROX muntjac DEM.PROX AOR:3→3'-CAUS-become LNK
 9329 ‘(My son’s) wife turned this wife of mine into this muntjac.’ (140512
 9330 fushang he yaomo-zh, 187)

9331 When the postnominal demonstrative is in plural or dual form, the prenominal
 9332 one is generally unmarked for number, as in (30).

- 9333 (30) *kuk*i* tc^heme kura* *n*u*-rca* *azo tu-ce-a*
 DEM girl DEM:PL 3PL.POSS-following 1SG IPFV:UP-go-1SG
 9334 *n*u*-nts^hi* *ma* *múj-pe*
 SENS-have.better apart.from NEG:SENS-be.good
 9335 ‘I have no other choice but to go (to heaven) with these girls.’ (31-deluge,
 9336 61)

9337 However, there are also a few examples with plural marking on both pre-
 9338 and postnominal demonstratives, as in (31), a remarkable phenomenon given the

fact that the number markers are strictly postnominal.⁴ Plural marking on the prenominal demonstrative with a singular postnominal demonstrative is not attested.

- (31) *nunura pya nura lonba zo ny-me-nu tce, bzungu sqaptuy*
DEM.PL bird DEM.PL all EMPH IFR-not.exist LNK young.man eleven
ny-k-ypa-nu-ci.
IFR-PEG-become-PL-PEG

‘All those birds disappeared, and became eleven young men.’ (140520 ye tiane-zh, 121)

Proximal prenominal demonstratives can be combined with the postnominal *nu*, as in (32), where the latter one is used as a topic marker. The opposite combination, a distal prenominal demonstrative with proximal postnominal one, is not attested in the corpus and presumably agrammatical.

- (32) *kuki xpi nuu puipunu ny,*
DEM.PROX story DEM TOP LNK
‘As far as this story goes,’ (11 examples in the corpus)

The medial demonstrative *nyki*, used to designate referents closer to the addressee than to the speaker, is found as a pronoun (§6.9.2.1), but also occurs as a prenominal determiner, with or without postnominal demonstrative (either proximal or distal), as in (33) and (34). It is frequently used with a noun taking a second person possessive prefix – note that the first syllable *ny-* of the demonstrative *nyki* itself probably originates from the second singular possessive, as proposed in §6.9.2.1.

- (33) *nyki nuu-typi uu-ta& kyr-yt nuu*
DEM:MEDIAL 2PL.POSS-staff 3SG.POSS-ON OBJ:PCP-write DEM
u&ry-kur-z-nympo-a-nuu
RH.Q-2→1-CAUS-watch-1SG-PL
‘You wouldn’t show me what is written on that staff of yours, would you?’ (2003ras, 61)

⁴This raises the question whether *nunura* should be analyzed as a prenominal demonstrative, forming a constituent with *pya nura*. There is no pause between *nunura* and *pya* in the sound file, but I cannot exclude the possibility that *nunura* here as a left-dislocated demonstrative (and should be followed by a comma).

9 The noun phrase

- 9363 (34) *nyki ny-ty-ri nuu notcu puu-tu*
DEM:MEDIAL 2SG.POSS-INDEF.POSS-thread DEM where PST.IPFV-exist
9364 ‘That thread of yours, where is it from?’ (2005 Norbzang, 180)

9365 The relative position of prenominal demonstratives and other pronominal ele-
9366 ments is not free. The aforementioned topic marker *ičqʰa* (§9.1.5.2) strictly occurs
9367 before prenominal demonstratives (as in 27), while nominal modifiers such as
9368 *χsyr* ‘gold’ in (35) appear closer to the noun.

- 9369 (35) *kuuki χsyr pyytciu ki ny-jas nuu-kham-a*
DEM.PROX gold bird DEM.PROX 1SG.POSS-hand IPFV-give[III]-1SG
9370 *ŋu*
be:FACT
9371 ‘(If you succeed) I will give you this golden bird.’ (2012qachGa, 46)
- 9372 (36) *nuutcu a-tursa ŋu, tce nyzo kuu [nuu azo a-cyrwu*
DEM:LOC 1SG.POSS-tomb be:FACT LNK 2SG ERG DEM 1SG 1SG.POSS-bone
9373 *nunura] a-ty-tuu-tcxt tce,*
DEM:PL IRR-PFV-2-take.out LNK
9374 ‘My tomb is there, if you take out my bones (from it),’ (150907
9375 niexiaoqian-zh, 109)

9376 Pronouns coreferent with a possessive prefix on the head noun, however, can
9377 be placed either after (36) or before (37) prenominal demonstratives.

- 9378 (37) *kuuki, azo [ki a-ku ki] puu-pʰut*
DEM.PROX 1SG DEM.PROX 1SG.POSS-head DEM.PROX IMP-cut
9379 *ra*
be.needed:FACT
9380 ‘Please behead me!’ (140507 jinniao-zh, 292)

9381 The principles governing the presence and absence of the demonstrative de-
9382 terminers, and the choice of the various patterns described above, is particularly
9383 complex to describe and will be a topic for future research, when a larger corpus
9384 of texts will become available. While the proximal demonstratives always have
9385 some deictic function (although it may not be always appropriate to translate
9386 them with a demonstrative in other languages such as English), the distal demon-
9387 stratives clearly contribute to marking topic (§9.1.5) and definiteness (§9.1.4.3),
9388 and disentangling these various functions is a complex matter.

9389 The distal demonstratives *nu* and *nunu* are particularly common after relative
 9390 clauses (either participial §23.2.1 or finite ones §23.2.2) and complement clauses,
 9391 where arguments against analysing these forms as complementizers are provided
 9392 (§24.3.3).

9393 Following locative adverbs or locative postpositional phrases, the distal and
 9394 proximal demonstratives can be used to express the meaning ‘the one/those (at)
 9395 *X*’ as in (38) and (39). Note that the number determiner *ra* can also be used in the
 9396 same way (example 23 in §9.1.1.2) even without being combined with a demon-
 9397 strative.

- 9398 (38) *amanj amanj at^bi ki kuu*
 INTERJ:SURPRISE INTERJ:SURPRISE downstream DEM.PROX ERG
 9399 ‘*a-βyo my-a<nu>tuy-a tce a-scawa*’
 1SG.POSS-uncle NEG-<auto>meet:FACT-1SG LNK 1SG.POSS-poor.of
 9400 *juu-susym juu-ŋu ye*
 SENS-think[III] SENS-be SFP
 9401 ‘The one down there, he is thinking ‘Poor of me, I will not meet my lama’,
 9402 isn’t he?’ (2003kandZislama, 203)

- 9403 (39) *a-pa, aki nuu stablupa*
 1SG.POSS-father down DEM born.in.the.year.of.the.tiger
 9404 *ky-βde w-spa nuu my-nuu-xsi ri,*
 OBJ:PCP-throw.away 3SG.POSS-material DEM NEG-AUTO-GENR:know LNK
 9405 ‘Father, the one down there, I don’t know if he is a (boy) born in the year
 9406 of the Tiger, to be thrown (in the lake), but...’ (2011-05-nyima, 154)

9407 Note however that demonstratives or number markers are not absolutely nec-
 9408 essary in such a context. A few (rare) examples of locative postpositional phrases
 9409 meaning ‘the one at/in/from’ without any modifier can be found, as in (40), where
 9410 the postpositional phrase is directly followed by the dative, here used in its loca-
 9411 tive meaning ‘by (the side of), near, at’ (§8.3.1). In this example, the phrase *sukyku*
 9412 *nutcu* does not mean ‘on the treetop’, but ‘the man who is on the treetop’.⁵

- 9413 (40) *[sukyku nutcu] u-p^he nutcu lo-zyatndzi tce*
 treetop DEM:LOC 3SG.POSS-DAT DEM:LOC IFR:UPSTREAM-reach-DU LNK
 9414 ‘(The tiger and the fox) arrived at (the place where the one who was) on
 9415 the treetop (was).’ (2012-x1-khu, 47)

⁵The story from which this example is taken is about three thieves who mistakenly steal a tiger during the night, believing it was an ox; one of the three thieves flees on the top of a tree – his manner of fleeing being here the characteristic distinguishing him from the other two thieves.

9 The noun phrase

9416 9.1.3 Quantifiers

9417 This section only discusses universal, mid-scalar and specifically distributive
9418 quantifiers; numerals and counted nouns, which also serve as quantifiers (in par-
9419 ticular distributive ones) are described in chapter 7.

9.1.3.1 Universal quantifiers

9421 The determiner *tʰamtṣyt* ‘all’, from Tibetan མස་ཅດ་ *tʰams.cad* ‘all’, is strictly post-
9422 nominal, as in (41). It cannot be used as a pronoun, and there are no examples in
9423 the corpus of *tʰamtṣyt* ‘all’ following a personal pronoun.

- 9424 (41) *sun̥guu kx-kui-nuŋtçyn tce tce si t^hamtçyt kuu numuu*
 forest AOR-SBJ:PCP-be.dangerous LNK LNK tree all ERG DEM
 9425 *pjua-kui-sat kui-ŋgryl jui-ŋu.*
 IPFV-GENR:S/O-kill SBJ:PCP-be.usually.the.case SENS-be
 9426 ‘The fierce/dangerous forest, it was (a place where) all the trees would kill
 9427 (people thrown into it).’ (28-smAnmi, 191)

The combination of a demonstrative such as *nua* ‘this’ with *t^hamtçyt* ‘all’ does not mean ‘all of this’, but ‘so much, so many’, as in (42). In this function, the prefixed form *st^hamtçyt* ‘so much’ (§5.8.4) is generally used, resulting in the form *nust^hamtçyt* ‘that much’ (§26.1.1.3).

- 9432 (42) *izora t^huu-d^hn-i q^he, k^ha nuu t^hamtcyt*
 1PL AOR-be.many-1PL LNK house DEM all

9433 *mua-pua-ymuu-xtc^huit-i q^he*
 NEG-SENS-RECIP-have.enough.place-1PL LNK

9434 ‘There was now more of us (than before), and so many of us could not fit
 in the house.’ (14-siblings, 103-104)

9435

Another universal quantifier, *kysufse* ‘all’, is common as a pronoun (§6.7). It is analyzable as a determiner in examples like (43) where it follows the plural marker *ra*, and takes the ergative *kuu*. It is restricted to human referents.

The universal quantifier *lonba* ‘all’ (from Tibetan ལོན་པ་ *lon.pa* ‘reached, enough, completed’), like *kysufse* ‘all’, also occurs after (never before) demonstratives and number markers as in (44).

- 9444 (44) *azø a-bi* *nura lonba azø kur*
 1SG 1SG.POSS-younger.sibling DEM:PL all 1SG ERG
 9445 *tr-nypwupa-t-a*
 AOR-take.care-PST:TR-1SG
 9446 ‘It was I who took care of all my younger brothers and sisters.’ (140426
 9447 tApAtso kAnWBdaR4, 1)

9448 In (45), *lonba* follows and has scope over the complement clause of the noun
 9449 of speech *kʰycyl* ‘discussion’ (§24.6.3.2).

- 9450 (45) [*a-wa* *nuu tcʰi* *kui-fse* *ci* *pui-ŋu* *kui*] *lonba*
 1SG.POSS-father DEM what SBJ:PCP-be.like INDEF PST.IPFV-be SFP all
 9451 *a-kʰycyl* *pui-fcxt ra*
 1SG.POSS-discussion IMP-tell be.needed:FACT
 9452 ‘Tell me all about what happened to my father.’ (Norbzang 2005, 172)

9453 In (46), it has scope over the possessor of the head noun *nuu-rmi* ‘their names’ re-
 9454 dundantly with *tʰamtçyt*. Here *nuu-rmi lonba* could be glossed as *nuu-rmi nuu-trngut*
 9455 ‘their name as a whole’, ‘their collective name’ (example 165, §9.1.8.1).

- 9456 (46) *nuu-zda* *rūdās uu-kui-ndza* *tʰamtçyt numura*
 3PL.POSS-companion animal 3SG.POSS-SBJ:PCP-eat all DEM:PL
 9457 *nuu-rmi* *lonba kuiŋi tu-kui-ti* *ŋu.*
 3PL.POSS-name all beast IPFV-GENR-say be:FACT
 9458 ‘All those that eat the other animals, their name, all of them, is ‘beast’.
 9459 (150822 kWrNi, 8)

9460 An alternative construction with a meaning similar to a universal quantifier
 9461 is totalitative reduplication (§12.4.1.5). In particular, the totalitative participle
 9462 *kui~kui-tu* ‘all who exist’ (§23.7) of the existential verb *tu* ‘exist’ commonly oc-
 9463 curs with a preceding noun phrase (in a head-internal relative, as in 47) or on its
 9464 own (as a headless relative) as a semi-lexicalized quantifier ‘all’.

- 9465 (47) *tce [uu-zda* *ra kui~kui-tu]* *kui nuu-rzaβ*
 LNK 3SG.POSS-companion PL TOTAL~SBJ:PCP-exist ERG 3PL.POSS-wife
 9466 *na-nuu-car-nuu* *nuu-ŋu*
 AOR:3→3'-AUTO-look.for-PL SENS-be
 9467 ‘All of his companions took (other women) as their wives.’ (Norbzang
 9468 2005, 57)

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The semantic proximity between totalitative reduplication and universal quantifiers such as *t^hamtçrt* ‘all’ is shown by examples such as (48), where both are used redundantly.

- (48) <*wangbapi*> *nui kui, turju kui~kui-pe, kui-mpcyr*
 ANTHR DEM ERG word TOTAL~SBJ:PCP-be.good SBJ:PCP-be.beautiful
t^hamtçrt spui~spe zo to-ti ri
 all TOTAL~be.able:FACT EMPH IFR-say LNK
 ‘Wang Bapi had said all the nice and pleasant words that he could (to
 convince the old man).’ (150831 jubaopen-zh, 96)

The marker *p^ha* ‘whole’ is exceptional in terms of word order, as it is the only strictly prenominal quantifier, occurring directly before the noun on which it has scope, as the following examples illustrate. It partially overlaps in meaning with the previous markers, as it can express the totality of individuals in a group as in (49) (see also for instance 84, §18.4.1.2), and also occurs with names of localities to refer to all the persons living in the place (73, §5.2.1).

- (49) *zara kui icq^ha sytc^ha yui ui-rjylpu*
 3PL ERG the.aforementioned place GEN 3SG.POSS-king
t^ha-nui-ndo-nui ndyre p^ha mk^hyrmaŋ zo
 AOR:3→3'-AUTO-take-PL LNK whole population EMPH
ta-sype-nui nui-ŋu
 AOR:3→3'-do.good-PL SENS-be
 ‘They became kings of this place, and treated well the whole population.’
 (Norbzang 2005, 447-448)

Its core meaning however is to express the entirety of an object/entity, as in the noun phrase *p^ha u-p^hoŋbu* ‘its whole body’ in (50). If an overt possessor (for instance, the 3SG pronoun *uzo*) is present, it occurs stranded before *p^ha* ‘whole’, as in (51).

- (50) *ma p^ha ui-p^hoŋbu zo ui-mdzu tu ri,*
 LNK whole 3SG.POSS-body EMPH 3SG.POSS-thorn exist:FACT LNK
ui-mat ui-taŋ zo ui-mdzu me,
 3SG.POSS-fruit 3SG.POSS-ON EMPH 3SG.POSS-thorn not.exist:FACT
 ‘It has thorns on its whole body, but no thorns on its fruits.’ (15-babW,
 264-265)

- 9495 (51) *u_{zo}_i p^ha u_i-p^hoŋbu*
 3SG whole 3SG.POSS-body
 9496 ‘Its whole body’ (several attestations)

9497 9.1.3.2 Mid-scalar quantifier

9498 The quantifier *tsuku* ‘some’ is generally used as a pronoun (§6.7.2), but it does
 9499 occur as a prenominal determiner as in (52), or a postnominal one as in (53) and
 9500 (54). It is most often used in the corpus with human referents, but is compatible
 9501 with inanimate objects, as shown by (53).

- 9502 (52) *tsuku turme ra kú-wy-mtsuy-nuu tce múaŋ-βduy, tsuku turme*
 some people PL IPFV-INV-bite-PL LNK NEG.SENS-be.serious some people
 9503 *ra [...] kú-wy-mtsuy-nuu tce tce, wuma zo c^hú-wy-z-nuŋmbvβ-nuu*
 PL IPFV-INV-bite-PL LNK LNK really EMPH IPFV-INV-CAUS-swell-PL
 9504 *q^he púa-wy-z-nuutufcyl-nuu q^he ku-rŋgwi-nuu*
 LNK IPFV-INV-CAUS-have.diarrhea-PL LNK IPFV-lie.down-PL
 9505 *puu-ra.*
 SENS-be.needed
 ‘Some people, when they are stung (by bees) are fine, other people, when
 9506 they are stung, it causes them swelling and diarrhea and they have to lie
 9507 down.’ (26-ndzWrnaR, 65-67)

- 9508 (53) *pjuu-nuŋble-a puu-ra’ pŋ-suso tce, kumt^huu tsuku*
 IPFV-cheat[III]-1SG SENS-be.needed IFR-think LNK toy some
 9509 *pŋ-k^ho tce,*
 IFR-give LNK
 ‘She thought ‘Let’s cheat him’ and gave him some toys.’ (2012 Norbzang,
 9510 134)

- 9511 (54) *ri kuu-muarkuu tsuku pŋ-tu-nuu tce tce,*
 LNK SBJ:PCP-steal some IFR.IPFV-exist-PL LNK LNK
 9512 ‘There were some thieves.’ (X1-khu, 7)

9513 Note in (55) the combination of the quantifier *tsuku* ‘some’ with the counted
 9514 noun *tuu-rdoŋ* ‘one piece’, which expresses here a restrictive meaning (thirteen or
 9515 fifteen children for a single person, §7.3.2.4).

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- 9518 (55) *tsuku turme tui-rdoṣ yuu ui-rjít, sqafsum jamar, sqamju*
 some person one-piece GEN 3SG.POSS-offspring thirteen about fifteen
 9519 *jamar tu-kua-tu pjy-tu.*
 about IPFV-GENR:S/A-exist IFR.IPFV-exist
 9520 ‘(In) some (cases), a single (woman) had thirteen or fifteen children.’
 9521 (140426 tApAtso kAnWBdaR, 88)

9.1.3.3 Distributive quantifier

9523 Although distributive meaning is generally expressed in Japhug with a counted
9524 noun (§7.3.2.2), the postnominal determiner *rayri* ‘each’ and its variant *ruri* ‘each’
9525 (from Tibetan རྙྙ ལྕ རྙྙ *ray.re* ‘each’ and རྙྙ ལྕ རྙྙ *re.re* ‘each’) can also express distributive
9526 meaning, as in (56).

- 9527 (56) *pas rcanu, tu-tupuu rayri kuu zo pjui-χsu-nu*
 pig UNEXP:DEG one-household each ERG EMPH IPFV-raise-PL
 9528 *ra.*
 be.needed:FACT
 9529 ‘Each single household has to raise pigs.’ (05-paR, 4)

It can also be used with numerals, as in (57), where it refers specifically to days.

- 9531 (57) *sqamŋu ranri zo zgo tu-ce puŋ-ŋu puŋ-ŋu*,
 fifteen EACH EMPH mountain IPFV:UP-go PST.IPFV-be SENS-be
 9532 ‘Every fifteen days, she would go up the mountain.’ (2005 Norbzang, 57)

When the quantifier *rayri* 'each' occurs in the same sentence with a counted noun, the scope of the two quantifiers is ambiguous, as in (58).

- 9535 (58) *riryβ rayri xsu-tyxuar a-ty-tuu-su-lxt tce*,
 mountain each three-lap IRR-PFV-2-CAUS-throw LNK
 9536 ‘Drag her three times around each mountain.’ (2005 Kunbzang, 421)

In the predicative possessive construction (§22.5.2.1), when the possessor takes the determiner *rajri*, its possessum is often followed by the distributive determiner *tuka* ‘each’ (and its reduplicated variant *tukaka*) as in (59).

- 9540 (59) *icq^{ha}a wi-mat rajri zo nuw wi-rū tuka*
 the.aforementioned 3SG.POSS-fruit each EMPH DEM 3SG.POSS-stalk own
 ntsua tu.
 always exist:FACT
 ‘Each of its fruits has its own stalk.’ (17-thowum, 34)

9543 The determiner *tuka* ‘each’ can also be used without a possessor in *rajri*, for
 9544 example with the distributive pronouns *zaka* ‘each his own’ and *zakastaka* ‘each
 9545 his own’ (§6.7.3) as in (60).

- 9546 (60) *zakastaka nui-k^ho tuka pjy-tu tce*
 each.his.own 3PL.POSS-room each IFR.IPFV-exist LNK
 9547 ‘Each of them had her own room.’ (140508 shie ge tiaowu de gongzhu, 85)

9548 In addition to the possessive construction, *tuka* ‘each’ also occurs in transitive
 9549 constructions, following objects, with broad scope over the whole action (61).

- 9550 (61) *pca^h tuka to-βzu-nui tce jo-nui-ce-nui.*
 reverence each IFR-make-PL LNK IFR-VERT-go-PL
 9551 ‘Each of them made a reverence and went back.’ (28-smAnmi, 176)

9552 The aspectual adverb *ntsui* ‘always’, which generally has scope over the whole
 9553 sentence (§22.2.1, §22.2.7), can also be used as a distributive quantifier as in (62),
 9554 where its scope is restricted to the temporal phrase *vnui-pyrme ny vnui-pyrme* ‘by
 9555 two years’ (with the additive *ny*, §8.2.6).⁶

- 9556 (62) *tce izo kyndziki ra vnui-pyrme ny vnui-pyrme ntsui ma*
 LNK 1PL COLL:sibling PL two-year ADD two-year always apart.from
 9557 *my-ac^hyt-i*
 NEG-differ.in.age:FACT-1PL
 9558 ‘We brother and sisters were born in intervals of two years each.’ (if
 9559 ranked by birth order, each couple of adjacent sibling differ in age from
 9560 each other by two years each) (14-siblings, 243)

9561 9.1.3.4 Intensifiers

9562 The intensifier *k^hro* ‘much’ and *zimk^hym* ‘much’ can have both scope over the
 9563 predicate (§26.1.1.2) or serve as postnominal modifiers meaning ‘many, a lot of’.
 9564 They can undergo emphatic reduplication to *k^hu~k^hro* and *zu~zimk^hym*, respec-
 9565 tively.

9566 When following a noun in absolute form as in (63), these intensifiers are syn-
 9567 tactically ambiguous, as they can be analyzed as having scope over the preceding
 9568 noun phrase, or on the whole predicate.

⁶On the morphosyntax of the verb *ac^hyt* ‘have X years of difference’, see §19.7.7.

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- 9569 (63) <baisuzhen> *nuu kuu, nyki, sŋas pŋy-spa tce* (...)
- ANTHR DEM ERG FILLER magic IFR.IPFV-be.able LNK
- 9570 *tuu-ŋgo ra zimkʰym zo to-yy-mna*
- INDEF.POSS-disease PL many EMPH IFR-CAUS-be.better
- 9571 ‘Bai Suzhen knew magic, and healed many diseases.’ (150825 baishe
9572 zhuan-zh, 66-67)

9573 In (64) however, *kʰuu~kʰro* unambiguously occurs inside of the ergative postpo-
9574 sitional phrase, showing that it cannot be analyzed here as a clausal intensifier.

- 9575 (64) [*turme kʰuu-kʰro*] *kuu zo yuu-to-rytsʰyt-nuu*
- person EMPH~much ERG EMPH CISL-IFR-try-PL
- 9576 ‘Many people came and tried it.’ (140505 xiaohaitu-zh, 16)

9577 9.1.3.5 Other

9578 In addition to the quantifiers discussed above, there are several markers which
9579 combine quantificational function with additional specific meanings.

9580 The marker *cinarura* ‘each better than the other’ is used as postnominal at-
9581 tribute (§9.1.8.1). In transitive constructions, is occurs between the noun and the
9582 ergative *kuu* as in (65). It is probably built by combining the pronoun *cuu* ‘who’
9583 (§6.5.2), the bound form of the copula *yu* ‘be’ (§22.5.1.1, **y-* → *ya-* due to assimi-
9584 lation with the following *-ra*) and the plural *ra* (§9.1.1.2) in reduplicated form.

- 9585 (65) *rjylpu cinarura kuu ta-tʰu-nuu cti ri,*
king each.better.than.the.other ERG AOR:3→3'-ask-PL be.AFF:FACT LNK
9586 *muu-tr-nyla-j cti tce,*
NEG-AOR-agree-1SG
9587 ‘(Many) kings, all better than the other, asked for (my daughters in
9588 marriage), but we did not agree.’ (2003 qachGa, 71)

9589 The adverbs *mutčʰimuruuz* ‘all kinds’ and *mundzamuχtčuy* ‘all kinds’ (from
9590 Tibetan མི་འདྲ་མི་གཞིག mi."dra.mi.gtɕig ‘diverse, different’) are also used as postnomi-
9591 nial attributes, located closer to the noun than numerals and demonstratives (66).
9592 These forms are only found in traditional narratives.

- 9593 (66) *conpʰu mundzamuχtčuy χsui-ri kutsysqi a-pur-tu,*
tree all.kinds three-hundred sixty IRR-IPFV-exist
9594 *uu-ku zuu pya mundzamuχtčuy χsui-ri kutsysqi nui] kuu*
3SG.POSS-on LOC bird all.kinds three-hundred sixty DEM ERG

- 9595 *pyymbri a-tx-lst-nur nua-ra*
 bird.song IRR-PFV-release-PL SENS-be.needed
 9596 'May there be three hundred and sixty trees of all kinds, and on them
 9597 three hundred and sixty bird of all kinds of species singing.'
 9598 (2011-04-smanmi, 201-202)

9599 The universal quantifier *rmuirmi* 'all, all kinds of' (67), a borrowing from Situ
 9600 (meaning 'everybody'), has a very close meaning, but is very rarely attested.

- 9601 (67) *maka tx-ryku rmuirmi yuu nua-rmi nua to-nyrmii*
 at.all INDEF.POSS-crops all GEN 3PL.POSS-name DEM IFR-say.name
 9602 *ri maka kuum mui-pjx-pjwii*
 LNK at.all door NEG-IFR-ANTICAUS:open
 9603 'He said the names of all kinds of crops, but the door did not open.'
 9604 (140512 alibaba-zh, 107)

9605 9.1.4 Indefinite and definite markers

9606 9.1.4.1 Indefinite determiner

9607 The form *ci* 'one' has among its many functions (in addition to pronoun, numeral
 9608 and adverb, see §6.6.1, §6.8, §6.7.2, §9.1.7, §7.1.1 and §22.2.1) that of singular indefi-
 9609 nite determiner, as in (68) and (69). It is typically used to introduce a new referent
 9610 in a story.

- 9611 (68) *tc^heme kui-mpcui~mpcyr ci ny-nui-tob*
 girl SBJ:PCP-EMPH~beautiful INDEF IFR-AUTO-come.out
 9612 'A very beautiful girl appeared (out of it).' (31-deluge, 50)

- 9613 (69) *tcelo tce tx-tciu ci c^hy-yi q^he,*
 upstream LNK INDEF.POSS-SON INDEF IFR:DOWNSTREAM-come LNK
 9614 'A boy came from upstream.' (2003-kWBRa, 41)

9615 Although *ci* can be used as a partitive pronoun 'one of them' (§6.7.2), as a post-
 9616 nominal determiner it does not have partitive meaning. To express a meaning
 9617 such as 'one of the boys', a counted noun such as *tu-rdo^z* 'one piece' is used
 9618 instead (§7.3.2.1).

9619 Note that when used as a prenominal modifier, *ci* has a completely different
 9620 (definite) meaning 'the other X' (§9.1.7). However, the indefinite *ci* is attested
 9621 in prenominal position if preceded by the prenominal identity modifier *kumax*

9 The noun phrase

9622 ‘other’, as in (70), though the exact syntactic analysis of such sentences may re-
9623 require more research (it is possible that *nṛ-ržaβ* here is an essive adjunct §8.1.7,
9624 and does not belong to the same constituent as *kumars ci*).

- 9625 (70) *nṛzo kumars ci nṛ-ržaβ nui-nui-car kui mna*
2SG other INDEF 2SG.POSS-wife IMP-AUTO-search ERG be.better:FACT
9626 ‘It would be better if you looked for another wife.’ (150909 xiaocui-zh, 163)

9627 There are no dual or plural indefinite determiners in Japhug. The plural marker
9628 *ra* can occur after the indefinite *ci*, but with a vague similitative meaning ‘and other
9629 things’ as in (71).

- 9630 (71) *ndzi-tcui ci, ndzi-me ci ra to-tu.*
3DU.POSS-son INDEF 3DU.POSS-girl INDEF PL IFR-exist
9631 ‘They_{du} had a boy and a girl (etc).’ (150827 tianluo-zh, 155)

9632 The indefinite *ci* is not obligatory for indefinite referents (whether specific
9633 or non-specific), and bare NPs can used as *fsapars* ‘animal’ and *qapar* ‘dhole’ in
9634 example (72).

- 9635 (72) *fsapars nui-me, a-pui-si qhe, ‘nui qapar kui ta-ndza*
animal AOR-not.exist IRR-PFV-die LNK DEM dhole ERG AOR:3→3'-eat
9636 *ŋu ma' tu-ti-nui cti ma,*
be:FACT SFP IPFV-say-PL be.AFF:FACT LNK
9637 ‘When an animal disappears, dies, people say ‘A dhole ate it.’ (28-qapar,
9638 25)

9.1.4.2 Indefinite pronoun as modifier

9640 The indefinite pronoun *tʰuci* ‘something’ (§6.6.2) has marginal uses as a prenom-
9641 inal indefinite modifier, as in (73), (75) and (80) below.

- 9642 (73) *tʰuci laχei ci c-pui-nui-βzjoz-nui tce, jx-ce-nui*
something trade INDEF TRAL-IMP-AUTO-learn-PL LNK IMP-go-PL
9643 *ra*
be.needed:FACT
9644 ‘Go and learn some trade!’ (140508 benling gaoqiang de si xiongdi-zh, 29)

9645 This construction arose perhaps from the use of the pronoun *tʰuci* as head of a
9646 postnominal relative clause with the verb *fse* ‘be like’, as illustrated by examples

like (74) or (85) in §6.6.2. Turning the verb *fse* ‘be like’ to a finite form as in (75) could cause the indefinite *t^huci*, head of the relative in (74), to be reanalyzed as the prenominal modifier of the immediately adjacent noun in (75).

- (74) *nura [t^huci [k^r-nusaxciuβ kuu-fse]] puu-ηu wo.*
DEM:PL something INF-have.a.contest SBJ:PCP-be.like PST.IPFV-be SFP
‘It was like a kind of contest.’ (160706 thotsi, 16)

- (75) *[t^huci u-jmŋo] ci zo puu-fse ri*
something 3SG.POSS-dream one EMPH PST.IPFV-be.like LNK
‘It looked like (he had had) some dream.’ (Lobzang2005, 74)

9.1.4.3 The marking of definiteness

Japhug has no dedicated definite determiner, but *nuu* and *nunu* as demonstrative determiners (§9.1.2) and as topic markers (§9.1.5) and the prenominal aforementioned topic marker *içq^ha* (§9.1.5.2) are generally used with definite referents.

Example (76) illustrates a typical example with the determiner *nuu*; the indefinite determiner *ci* (§9.1.4.1) occurs in the first introduction of a new referent in the story as in the first clause of example (76), but on the following occurrence of the same noun *nuu* is found.

- (76) *tce qajdo ci jo-yi tce, tce qajdo nuu kuu ‘mo laz tu,*
LNK crow INDEF IFR-come LNK LNK CROW DEM ERG girl karma exist:FACT
p^ho laz me’ to-ti.
boy karma not.exist:FACT IFR-say
‘A crow came. The crow said: ‘The girl will have chance, the boy won’t.’
(28-qAjdoskAt, 8)

However, although nouns phrases followed by *nuu* and *nunu* more often than not denote definite referents, these determiners cannot be analyzed as definite determiners, as noun phrases with *nuu* or *nunu* can in certain cases have indefinite referents.

A very clear case of use of *nuu* with an indefinite referent occurs on nouns serving as heads of head-internal relative clauses. A well-attested typological generalization is that in this type of relative clauses, definiteness marking is aggrammatical (see Basilico 1996). In Khroskyabs, Lai (2017: 636) reports that the definiteness marker =*tə* is indeed not accepted on the head noun of head-internal relatives. In Japhug however, *nuu* does occur in such a syntactic context. For instance, in (77), the head *tr-nmas* *nuu kuu* is subject of the participle *nuu-kuu-nuu-çar* ‘looking

9 The noun phrase

for', and is embedded in the participial relative clause indicated in brackets – the presence of the ergative *kua* precludes to analyze it as a post-nominal relative (§23.4.3.1). From the meaning of the sentence the head *tx-nmaꝑ* 'husband' is clearly indefinite non-specific non-generic (see Lehmann 1984: 286–291). The fact that it takes the marker *nua* shows that this marker, unlike Khroskyabs =*ta*, is not primarily marking definiteness.

- 9677 (77) *tceeri [tx-nmaꝑ nua kua u-rꝑaz kua-yn̥t̥e^hu]*
 9678 but INDEF.POSS-husband DEM ERG 3SG.POSS-wife SBJ:PCP-be.many
 9679 *nua-kua-nua-car], aþyndtundyst t̥ndyryri*
 9680 IPFV-SBJ:PCP-AUTO-search everywhere illegitimate.child
 9681 *tu-kua-þzu p̥jy-tu.*
 9682 IPFV-SBJ:PCP-make IFR.IPFV-exist
 9683 'However there were husbands who were looking for several women and
 9684 had illegitimate children.' (140427 tAndAGri, 3)

9685 Other cases of indefinite noun phrase with *nua* are observed with left-dislocated
 9686 topics. In example (78), we find a type of tail-head linkage (§25.1.7) where both
 9687 the noun phrase *spjaŋkui ɔnuaꝑ* 'two wolves' and the verb *jy-k-xtuy-ci* 'he met' are
 9688 repeated; in the second occurrence, the noun phrase is topicalized and is followed
 9689 by the topic marker *nunu*, with a slight pause of hesitation. The determiner *nunu*
 9690 in this clause, unlike *nua* in (76), does not mark definiteness: that clause cannot
 9691 be understood as 'He met the two wolves'.
 9692

- 9693 (78) *spjaŋkui ɔnuaꝑ jy-k-xtuy-ci. spjaŋkui ɔnuaꝑ nunuu, tcendyre*
 9694 wolf two IFR-PEG-meet-PEG wolf two DEM LNK
 9695 *jy-k-xtuy-ci tce icq^ha, kua-ry-nt̥e^ha*
 9696 IFR-PEG-meet-PEG LNK the.aforementioned SBJ:PCP-A.PASS:N.HUM-kill
 9697 *nua wuma zo jy-mu.*
 9698 DEM really EMPH IFR-be.afraid
 9699 'He_i (the butcher) met two wolves. He_i met two wolves, and the butcher,
 9700 was very much afraid.' (150902 liaozhai lang-zh, 7-8)

9701 The determiners *nua* or *nunu* are rarely adjacent to the indefinite singular de-
 9702 terminer *ci* in the corpus. In all cases with *ci* followed by *nua* (other than the
 9703 identity pronoun in §6.8), or with *nua* followed by *ci* in the corpus, they belong
 9704 to different constituents. For instance, in (79), *ci* is in adverbial use (§22.2.1) and
 9705 does not belong to the preceding noun phrase.

- 9705 (79) [t^he'me nuu] ci p^y-z^yy-s^yp^byr q^he
 girl DEM one IFR-REFL-shake LNK
 'The girl shook herself.' (02-deluge2012, 125)

9707 In (80) although *nunu* follows *ci*, it has scope over the both preceding phrases,
 9708 which are left-dislocated and followed by a pause.

- 9709 (80) ky-xtcyr tce nunuu tce tce icq^ha, [[t^huci tum bri
 INF-attach LNK DEM LNK LNK the.aforementioned something rope
 9710 tx-ri kuu-fse kuu] [laχtc^ha ci] nunuu], ci
 INDEF.POSS-thread SBJ:PCP-be.like ERG thing INDEF DEM one
 9711 kú-wy-sui-pa tce, kú-wy-xtcrr,
 IPFV-INV-CAUS-do LNK IPFV-INF-attach
 9712 'To attach' (means), to put together, attach something with something
 9713 like a rope or a thread.' (150902 kAxtCAr, 2-3)

9714 However, the indefinite determiner *ci* can be followed by *nuu* as in (81).

- 9715 (81) nuu, kuu-rzi ci nuu yyyzu ma^b kuu
 DEM SBJ:PCP-be.heavy INDEF DEM exist:SENS not.be:FACT SFP
 9716 'This is not a difficult thing (to do).' (divination2005, 15)

9717 The aforementioned topic marker *icq^ha* (§9.1.5.2) is almost always used with
 9718 definite referents when prenominal, as in (78) above, and is the closest candidate
 9719 to be analyzed as a definiteness marker in Japhug. However, it does occur with
 9720 non-specific generic referents as in (82), including some that are very clearly
 9721 indefinite as in (83); note the absence of postnominal determiner *nuu* (83).

- 9722 (82) icq^ha laulymu nuu t^buu-rypuu tce tce
 the.aforementioned female.cat DEM IPFV-bear.young LNK LNK
 9723 uu-sji tce ky-nuu-rnguu nuu st^buci
 3SG.POSS-day LNK INF-AUTO-lie.down DEM so.much
 9724 m^uj-ts^u ma uu-puu ra χse nuu-ra
 NEG:SENS-have.time.to LNK 3SG.POSS-young PL feed:FACT SENS-be.needed
 9725 'A/the female cat (unlike male cats), when it had had kitten, does not
 9726 have time to sleep during the day, as it has to feed its kitten.' (21-IWLU,
 9727 (83) icq^ha lypuy uu-ryi zo fse.
 the.aforementioned radish 3SG.POSS-seed EMPH be.like:FACT
 9728 'It looks like a radish seed.' (hist-26-qro-fourmi, 61)

9 The noun phrase

9729 In (80), *içqʰa* also precedes two phrases involving indefinite referents, but there
9730 is a marked pause, and this is a case of *içqʰa* in its function as speech filler (§10.3).

9.1.4.4 Absence of definiteness marking

9732 Like many languages (Creissels 2006b: 130), Japhug uses bare nouns without any
9733 definiteness marking. Bare nouns are most often non-referential, as *tcʰeme* ‘girl’
9734 in (84).

- 9735 (84) *vnasna tcʰeme tuu~ty-tu ny, kyndzisqʰaj tu-ky-sui-βzu*
both girl COND~AOR-exist LNK COLL:sister IPFV-INF-CAUS-make
9736 ‘If both of them have girls, let them be sisters.’ (zrAntCW, 4)

9737 Bare nouns are less common with referential nouns (except in answers to ques-
9738 tions), but examples can be found, as *qacʰya* ‘fox’ in (85).

- 9739 (85) *qacʰya kuu maxteu ty-tuit-a nuu my-tuu-ste*
fox ERG I.told.you.so AOR-say[III]-1SG DEM NEG-2-do.like[III]:FACT
9740 *ti nuu-ŋu*
say:FACT SENS-be
9741 ‘The fox says: ‘You do not do as I told you to.’ (2003qachGa, 44)

9742 Personal names generally occur as bare nouns, without any definiteness marker
9743 as in (86), but there are no constraints against co-occurrence of personal names
9744 with the determiner *nuu* either (see §5.3.4).

- 9745 (86) *urjyŋpanma kuu blaysantchin u-cki*
Padmasambhava ERG Gesar 3SG-DAT
9746 ‘Padmasambhava (told) Gesar.’ (Gesar, 2)

9.1.5 Topic markers

9.1.5.1 Delimitative topic

9749 The delimitative topic marker *puu~puu-ŋu ny* ‘as for..., concerning...’ is transpar-
9750 ently derived from the past imperfective of the verb ‘be’ in conditional form ‘if it
9751 was...’ (with verb-initial reduplication, §12.4.1), as other copulas such as affirm-
9752 ative *cti* ‘be’ and *mas* ‘not be’ in (87).

- 9753 (87) *nunuu koŋla zo tycime puu~puu-mas ny*
DEM really EMPH princess COND~PST.IPFV-not.be LNK
9754 ‘If she was not really a princess,’ (140519 wandou gongzhu-zh, 71)

The delimitative construction generally has scope over a noun phrase, which can have an additional demonstrative *nū* as topicalizer as in (88) (see §9.1.5.4).

- (88) *a-mu nui pw~pw-ηu ny, qhlta bduxpakṣrpw yu*
 1SG.POSS-mother DEM COND~PST.IPFV-be LNK nāga p.n GEN
w-me stu kui-xtci nui a-mu
 3SG.POSS-daughter most SBJ:PCP-be.small DEM 1SG.POSS-mother
nui-pe,
 SENS-be.good
 ‘As for my mother, the youngest daughter of the Nāga Gdugpa dkarp
 good to be my mother.’ (Gesar, 5)

In this construction, the verb is in the process of becoming grammaticalized as a topic particle. It is possible to find examples where the verb still takes person indexation in the delimitative construction when the topicalized element is a first or second person pronoun, as in (89).

- (89) *azo pu~pu~ŋu-a ny, kyn̩dz̩iwi kum̩tu tu-j,*
 1SG COND~PST.IPFV-be-1SG LNK siblings five exist:FACT-1SG
 ‘Concerning me, we are five brothers and sisters.’ (hist140501 tshering
 skyid, 1)

However, there are also examples with first or second person pronoun without indexation on the delimitative marker, as in (90), (91) and (92), where a first person singular form *pui~pui-ju-a nr* or second person *pui~pui-tu-ju nr* would have been expected. Such examples show that *pupuŋunr* has ceased to be analyzed as a verb form at least in these cases. Moreover, third person plural and dual indexation is hardly ever found in the delimitative construction.

- (90) *nyzo pu:punyŋ*, *tɻndzi ra yu nui-kui-β̥sa*,
 2SG as.for demon PL GEN 3PL.POSS-SBJ:PCP-be.victorious
nui-rjylpu tu-ŋu
 3PL.POSS-king 2-be:FACT
 ‘You, you are the king of the demons.’ (hist140512 fushang he yaomo-zh,
 61)

(91) *azø kur-fse pu:punyŋ*, *cunŋui sy-xtcui~xtci nutcu*, *χpum*
 1SG SBJ:PCP-be.like as.for before GER-be.small DEM:LOC monk
ly-ky-ta,
 AOR:UPSTREAM-OBJ:PCP-put
 ‘For instance me, (I was) sent to become monk early in my childhood.’

9 The noun phrase

9782 (160721 XpWN, 7)

- 9783 (92) *azo pupuŋyunx, nuu* [...] *azo yu a-ndza nuu*
 1SG as.for DEM 1SG GEN 1SG.POSS-reason DEM
 9784 *tu-o<nu>-lulat-a pu-ŋu tce,*
 IPFV-<AUTO>fight-1SG PST.IPFV-be LNK
 9785 As for me, I was fighting for my own sake.' (140512 abide he mogui-zh, 92)

9786 A short form *ŋunx* instead of *pupuŋju ny* is also attested, as in (93).

- 9787 (93) *ma u-ŋga ra ŋunx, maka wuma zo ko-nqhi ma.*
 LNK 3SG.POSS-clothes PL as.for at.all really EMPH IFR-be.dirty LNK
 9788 'As for his clothes, they had become very dirty.' (conversation 140510)

9789 The delimitative topic construction can be used to introduce the main topic
 9790 of a following discourse (as in 89 and 91), but can be used for contrastive topics,
 9791 as in example (92) where the speaker expresses a contrast between his and the
 9792 addresses action ('you, you were fighting for the sake of other people').

9793 9.1.5.2 Aforementioned topic

9794 The marker *içqʰa* 'the aforementioned' is used on referents that have been pre-
 9795 viously mentioned in the same story, usually only a few sentences back. It is
 9796 strictly prenominal.

9797 Example (94) illustrates the most typical use of this marker. Sentence (94a)
 9798 introduces a new referent, *kṛtum* 'ball of thread' marked with the indefinite de-
 9799 terminer *ci* (§9.1.4.1). Three clauses later in (94d), the same referent occurs again
 9800 as an overt noun with two topic markers, the postnominal *nuu* and the prenomi-
 9801 nal *icqʰa*.

- 9802 (94) a. *'razri kṛtum ci jui-ra, taqaβ ci jui-ra' to-ti qʰe*
 9803 thread ball INDEF SENS-need needle INDEF SENS-need IFR-say LNK
 'He told (Rgyabza) 'I need a ball of thread and a needle.'
 9804 b. *tcendyre jy-kʰo qʰe,*
 LNK IFR-give LNK
 9805 'She gave it to him.'
 9806 c. *tce u-ndz̥yt̥i ka-tsum-nuu nutcu qʰe tce,*
 LNK 3SG.POSS-meal AOR:3→3'-bring-PL DEM:LOC LNK LNK
 9807 'When they brought his meal,'

- 9808 d. *icq^ha* *krtum nuu uzo ku ko-ndo,*
 the.aforementioned ball DEM 3SG ERG IFR-take
 9809 'he took the ball of thread, and...' (Gesar 270-272)

9810 A systematic study of the use of the topic marker *icq^ha* in Japhug must over-
 9811 come two inherent difficulties. First, this topic marker is homophonous with (and
 9812 historically related to) the speech filler *icq^ha* (§10.3) and with the adverb *icq^ha* 'just
 9813 now', which can also precede noun phrases. Listening to the sound files can help
 9814 distinguishing between the three, as the speech filler is always followed by a
 9815 pause (and optionally by the demonstrative *nuu*), but there are still ambiguous
 9816 sentences (see below). Second, *icq^ha* occurs on nouns designating entities that
 9817 the speaker considers to have been previously referred to in the conversation,
 9818 even if they are not present in the same recording.

9819 For instance in (95) the noun *pyrrnos* 'a species of fungus' is used with *icq^ha*,
 9820 although this name does not occur before in the same text; it was however men-
 9821 tioned the day before in another recording.

- 9822 (95) *nui zdumqe c^ho icq^ha, pyrrnos numi ndzi-ts^huya*
 DEM fungi.sp. COMIT the.aforementioned fungi.sp. DEM:DU 3DU.POSS-form
 9823 *wuma zo naχtcuwy.*
 really EMPH be:identical:FACT
 9824 'The *zdumqe* and the *pyrrnos* are very similar.' (23-mbrAZim, 82)

9825 The topic marker *icq^ha* transparently comes from the adverb *icq^ha* 'just now'
 9826 (§22.2.1). The pivot constructions that allowed reanalysis from adverb to prenom-
 9827 inal topic marker are very probably headless relatives (§23.4.1) as in (96), or com-
 9828 plement clauses as in (97).

- 9829 (96) *[icq^ha tx-tut-a] nuu tú-wy-stu q^he,*
 just.now IFR-say[II]-1SG DEM IPFV-INV-do.like LNK
 9830 'One does as I just said, and...' (2002tWsqr, 139)

- 9831 (97) *icq^ha [z-nui-z-munmu-t-a] nuu*
 the.aforementioned TRAL-AOR-CAUS-move-PST:TR-1SG DEM
 9832 *mui-pjy-pe rcama.*
 NEG-IFR.IPFV-be.good FSP
 9833 'It was probably not a good thing that I had (gone and) moved them (as I
 9834 said above).' (150819 kumpGa, 45)

9 The noun phrase

These sentences are still synchronically ambiguous in Japhug; in (97) the context makes it clear that *içqʰa* is the topic marker (since the fact of having moved (the eggs) had been told a few sentences back) and not an adverb ‘just now’ with a temporal reference in the past, as the meaning would be ‘it was probably not a good thing that I had just moved them’ (an impossible interpretation in this context, since this sentence is an explanation why several eggs had not given chicks, several days after they had been brought to another place). However, extracted from the context, both interpretation would be equally possible for (97), and correspond to two different syntactic structures.

With postnominal (§23.4.4) or left-headed head-internal relative clauses (§23.4.3) as in (98), *içqʰa* can also be ambiguous. Since the adverb *içqʰa* ‘just now’ can occur both before the object (99a) or before the verb (99b) in an independent clause, a relative such as (98) can be either interpreted ‘the axe (mentioned above) that he had whetted’ (with the topic marker *içqʰa* outside of the relative clause, having scope over its head) and ‘the axe that he had just whetted’ with the adverb *içqʰa* ‘just now’ inside the relative clause.

- (98) *tcendyrre <luban> kur içqʰa [turpa tʰa-fse] nur*
LNK ANTHR ERG the.aforementioned axe AOR:3→3'-whet DEM
to-ndo tce,
IFR-take LNK
'Luban took the axe that he had whetted.' (150902 luban-zh, 90)

- (99) a. *içqʰa turpa tʰu-fse-t-a*
just.now axe AOR-whet-PST:TR-1SG
b. *turpa içqʰa tʰu-fse-t-a*
axe just.now AOR-whet-PST:TR-1SG
'I just whetted a/the axe.' (elicited)

The use of *içqʰa* as a topic marker with nouns (as in 94d above) probably took place by reanalysis of the adverb in headless or postnominal relatives, or in complement clauses as above, then generalized to all noun phrases even those without subordinate clause.

9.1.5.3 Adversative topic

There are two adversative topic markers in Japhug, *zo* and *ndyrre*. The former is similar in meaning to Mandarin 倒 <dào> ‘instead, on the other hand’, and occurs in contexts with a strong adversative meaning ‘however, but, on the other hand’ as in (100).

- 9866 (100) *jinde ku-nur-tu ci kuma my-xsi ma*
nowadays DUBIT-AUTO-exist QU SFP NEG-GENR:know LNK
9867 *kuucunguu bo puu-tu,*
in.former.times TOP.ADVERS IPFV.PST-exist
9868 ‘It is not clear whether it is still to be found nowadays, but it did exist in
9869 former times.’ (23-scuz, 30)

9870 The marker *bo* also occurs in two constructions meaning ‘of course’. First, it is
9871 found in the ‘X *bo* X’ construction meaning ‘of course (it is) X’, as in (101b), the
9872 answer to the question in (101a) which presents two alternatives.

- 9873 (101) a. ‘*a-tycime, ny-βju jnu-car-a ci, azo tu-ozgruu-a*’
1SG.POSS-lady 2SG.POSS-mat IPFV-search-1SG QU 1SG IPFV-bow-1SG
9874 *nura to-ti, ‘ma ny-pi yuu azo tx-azgruu-a*
DEM:PL IFR-say LNK 1SG.POSS-elder.sibling GEN 1SG AOR-bow-1SG
9875 *cti’ to-ti*
be.AFF:FACT IFR-say
9876 ‘He said ‘My lady, should I look for a cushion for you, or should I
9877 bow (for you to sit on my back)’, and he said ‘Because I bow for your
9878 elder sister (to sit).’
9879 b. ‘*nyzo bo nyzo ma, a-βju jnu-tua-car*
2SG TOP.ADVERS 2SG LNK 1SG.POSS-mat IPFV-2-search
9880 *kui-ytsutsu me’ to-ti.*
INF.STAT-have.time not.exist:FACT IFR-say
9881 ‘Of course (I will sit on) you, there is no time to look for a mat for
9882 me.’ (2014-kWLAG, 195)

9883 Second, *bo* is commonly used with the adverb *luski* ‘of course’, as in (102), not
9884 necessarily with any adversative meaning.

- 9885 (102) *pÿynas ky-ti ci tu tce, nuunu bo luski*
pheasant OBJ:PCP-say INDEF exist:FACT LNK DEM TOP.ADVERS of.course
9886 *li nuu pya nyu*
again DEM bird be:FACT
9887 ‘There is a bird called *pÿynas* (*Pucrasia macrolopha*), this one, of course
9888 (since its name contains *pya* ‘bird’, §5.5.5.1, Table 5.8) is also a bird (like
9889 those previously discussed).’ (23-pGAYaR, 2)

9890 The marker *ndyrre* presents a milder adversative meaning ‘as far as X is con-
9891 cerned, unlike some other (people)’ as in (103).

9 The noun phrase

- 9892 (103) *tsuku kur-rga tu, tsuku my-kur-rga tu. azo*
 some SBJ:PCP-like exist:FACT some NEG-SBJ:PCP-like exist:FACT 1SG
 9893 *ndyre rga-a.*
 TOP.ADVERS like:FACT-1SG
 9894 ‘Some like it, some don’t; as far as I am concerned, I like it.’ (07-tCGom2,
 9895 8)

9896 In (104), the use of *ndyre* suggests the meaning ‘as opposed to other possible
 9897 missions’.

- 9898 (104) *a a-pa, nuu ndyre wuma zo nqa,*
 INTERJ 1SG.POSS-father DEM TOP.ADVERS really EMPH be.difficult:FACT
 9899 *sryzur.*
 be.dangerous:FACT
 9900 ‘Ah father, this (mission on which you send me) is very difficult and
 9901 dangerous indeed.’ (28-smAnmi, 72)

9902 In (105), *ndyre* has a clear adversative meaning ‘this evening, on the other hand’
 9903 (as opposed to the previous evenings).

- 9904 (105) *juufcuar turmuu tce ny-pi tulvt nuu*
 yesterday dusk LNK 2SG.POSS-elder.sibling second.sibling DEM
 9905 *uu-tas ko-nqor-a ri muu-tý-wy-tsum-a tce,*
 3SG.POSS-on IFR-hang-1SG LNK NEG-AOR:UP-INV-take.away-1SG LNK
 9906 *juuymuur ndyre nyzo tu-kui-tsum-a*
 this.evening TOP.ADVERS 2SG IPFV:UP-2→1-take.away-1SG
 9907 *ra ma tce kutcu azo-sti ma maye-a*
 be.needed:FACT LNK LNK here 1SG-alone apart.from not.exist:SENS-1SG
 9908 *tce,*
 LNK
 9909 ‘Yesterday at dusk I clung onto your second eldest sister but she did not
 9910 take me away, this evening take me away, I am all alone here.’
 9911 (07-deluge, 56-57)

9912 The phrase *nuu sryzur* ‘even, rather than that etc’ (§8.2.7) is also used as an
 9913 adversative topic marker similar to *ko* (see in particular example 139).

9.1.5.4 The demonstrative *nuu* as a topic marker

9914 The postnominal determiner *nuu* and its reduplicated form *nunu* is one of the
 9915 most common words in Japhug, and has a considerable number of functions. It is

used as a demonstrative (§9.1.2), contributes to expressing definiteness (§9.1.4.3) and could be argued to be a subordinator (an analysis not adopted in the present work, see §24.3.3).

In addition, it is commonly used to mark topic: left-dislocated noun phrases generally (though not compulsorily) take this determiner. For instance, in texts presenting animals or plants, their name on first occurrence is left dislocated and followed by the determiner *nui*, as in (106).

- (106) *qawuuz nui, (qawuuz nui puu-tuu-mto-t, ye?) qawuuz nunui,*
 Edelweiss DEM Edelweiss DEM AOR-2-see-PST:TR SFP Edelweiss DEM
 nrki, kuucunguu tce,
 FILLER before LNK
 ‘The edelweiss, (you saw Edelweiss before, right?)... The edelweiss, in
 former times,’ (15-babW, 177)

It also occurs with personal pronouns, as in (107), a sentence where the narrator talks about his personal situation, as opposed to that of his parents who were mentioned in the previous lines.

- (107) *azo nui, muŋi zuu kuu-ry-βzjoz jnu-ce-a*
 1SG DEM TOPO LOC SBJ:PCP-ANTIPASS-learn IPFV:WEST-go-1SG
 puu-ŋu.
 PST.IPFV-be
 ‘As for me, I was going to school in Mungi.’ (2010-09, 22)

In its function as a topicalizer, the determiner *nui* can follow a noun with postnominal demonstratives, as in (108). However, due to the difficulty of systematically sorting out the topicalization and demonstrative functions of this marker, I do not attempt to reflect this distinction in the glosses, and use DEM everywhere.

- (108) *tceri kuki muuntoŋ kuki nui puupunjuny, wuma zo*
 LNK DEM.PROX flower DEM.PROX DEM as.for really EMPH
 kuu-zru, kuu-pe,
 SBJ:PCP-be.strong SBJ:PCP-be.good
 ‘But concerning this flower, so precious and nice’ (150820 meili de
 meiguihua-zh, 58)

9.1.5.5 The linker *tce* as a topic marker

The word *tce*, which originates from a locative postposition (§8.2.4.4), is mainly used in Japhug as a linker (§25.1.6) and as a postposition (§8.2.4.3). It is one of the most common words in the corpus.

9 The noun phrase

9946 In addition, it can serve as a topic marker, following left-dislocated noun or
9947 postpositional phrases (109).

- 9948 (109) *tsuku kuu tce lypuy ra mbuisut c^huu-lst-nuu tce nura*
9949 some ERG LNK radish PL grating IPFV-throw-PL LNK DEM.PL
nua-rku-nuu nua-nyu
9950 IPFV-put.in-PL SENS-be
9951 ‘Some people, they grate radish and use it as filling (for the sausage).’
(05-paR, 77)

9952 9.1.6 Focus markers

9953 There are several focalization strategies in Japhug, including pseudo-clefts (§23.6.1)
9954 and sentence-final copulas (§22.5.3.2), but focalized constituents are sometimes
9955 also unmarked, though they have to be overt (§22.1.2.3).

9956 This section presents the markers used to express different types of focus on
9957 noun phrase constituents.

9958 9.1.6.1 Additive and scalar focus marker *kuny*

9959 The additive and scalar focus marker *kuny* ‘also, even’ follows the constituent
9960 over which it has scope, which can be noun phrases, postpositional phrases but
9961 also subordinate clauses (§25.2.3.1). As with other function words with the syllable
9962 *ny* as last element (§3.7), the stress is on the first syllable (*ku^un^y*) and the
9963 vowel on the second syllable is often elided (a pronunciation *kun* is often heard).

9964 The marker *kuny* expresses both additive focus, as in (110), and scalar focus,
9965 as in (111) in affirmative sentences. It is also compatible with negative verb forms,
9966 as in (112), expressing the meaning ‘not even’ (see also *ciny* ‘(not) even one’ in
9967 §9.1.6.4).

- 9968 (110) *azo kuny stablupa nyu-a tce*
9969 1SG also born.in.the.tiger.year be:FACT-1SG LNK
‘Me too (like you), I am of the Tiger year.’ (2011-05-nyima, 168)

- 9970 (111) *zara zo uu-ŋguuz kuny tu-nynduat-nuu tce nuu*
9971 3PL EMPH 3SG.POSS-among:LOC also IPFV-fight-PL LNK DEM
kuu-βba yyzu, kuu-njo yyzu q^he,
SBJ:PCP-win SENS:exist SBJ:PCP-lose SENS:exist LNK
9972 ‘Even among themselves, they fight, and there are winners and losers.’
9973 (20-sWNgi, 62-63)

- 9974 (112) *tua-sŋi munto& tua-rdo& kumy ci ci tce máj-st^hut*
 one-day flower one-piece also one one LNK NEG:SENS-finish
 9975 ‘Sometimes one cannot finish even one pattern (on the belt) in one day.’
 9976 (2011-06-thaXtsa, 47)

9977 As an additive focus marker, *kumy* can be repeated on all the nouns designating
 9978 the members of a group sharing a particular property, in the construction *X kumy*,
 9979 *Y kumy* ‘both *X* and *Y*’, as in (113).

- 9980 (113) *a-puu-ŋu tce, azo kumy tašrdo rjitpa a-puu-ŋu-a, xpyltcin kumy*
 IRR-IPFV-be LNK 1SG also TOPO lineage IRR-IPFV-be-1SG ANTHR also
 9981 *tašrdo rjitpa a-puu-ŋu, ... nuu tci-rjiti nuni tce tašrdo*
 TOPO lineage IRR-IPFV-be DEM 1DU.POSS-offspring DEM:DU LNK TOPO
 9982 *rjitpa ma nuu ma kumaa& rjitpa nuu ky-rtsi*
 lineage LNK DEM apart.from other lineage DEM NMLZ:O-count
 9983 *me.*
 not.exist:FACT

9984 ‘For instance suppose that both Dpalcan and I were from Taqrdo lineage,
 9985 then our two children would only count as members of the Taqrdo
 9986 lineage and no other lineage.’ (140426 rJitpa, 13-15)

9987 The scope of *kumy* is generally exclusively on the constituent that it imme-
 9988 diately follows, but there are cases where the scope is more extensive. In (114),
 9989 *kumy* occurs between the pronoun *azo* and the following participial verb form,
 9990 which bears a 1SG possessive prefix *a-* coreferent with that pronoun (see also 118
 9991 below). The semantic scope of *kumy* here is on the whole relative *azo a-ky-suoso*
 9992 ‘(the things) that I want’ rather than exclusively on the pronoun *azo*.

- 9993 (114) *azo kumy a-ky-suoso nuu ty-stu-nuu ra*
 1SG also 1SG.POSS-NMLZ:O-think DEM IMP-do.like-PL be.needed:FACT
 9994 ‘(I will do as you say, but) do also the things I want.’
 9995 (2003kAndzwsqhaj2, 47)

9996 The focus marker *kumy* is found with nouns or pronouns in core argument
 9997 function, including S (115), O (116), and semi-objects (117). Examples with transi-
 9998 tive subjects are presented below (124 and 125).

- 9999 (115) *azo kumy ny-rca yi-a cti*
 1SG also 2SG.POSS-following come:FACT-1SG be.AFF:FACT
 10000 ‘I am coming with you too.’ (2011-05-nyima, 171)

9 The noun phrase

- 10001 (116) *ma nu-χpum kumy k^hro my-kur-fkaβ kur-fse*
 LNK 3PL.POSS-knee also much NEG-SBJ:PCP-cover SBJ:PCP-be.like
 10002 *ku-ryzi-nua*
 IPFV-stay-PL
 10003 ‘(Gents) would (wear trousers that did) not cover much even their knees.’
 10004 (30-rkAsnom, 5)
- 10005 (117) *wi-rū nura laðdum wi-ju* *kumy my-sna, ma*
 3SG.POSS-trunk DEM:PL tool 3SG.POSS-handle also NEG-be.worth LNK
 10006 *my-ngut.*
 NEG-be.strong:FACT
 10007 ‘(The wood from) its trunk is not even good (enough to be used to make)
 10008 tool handles, as it is not strong.’ (17-xCAj, 79)
- 10009 It also occurs with all types of oblique arguments and adjuncts, including genitive *yuu* (118), dative *wi-cki* (119), locational adjuncts in *t_čeu* (120) or *ri* (121), temporal
 10010 adjuncts (122) or adjuncts expressing manner or cause (123).
- 10012 (118) *azuy kumy a-mp^hrūmū a-pu-tur-su-re*
 10013 1SG:GEN also 1SG.POSS-divination IRR-PFV-2-CAUS-look[III]
wi-túr-c^ha
 QU-2-can:FACT
 10014 ‘Can you ask (the monk) to make a divination for me too?’ (The
 10015 divination, 31)
- 10016 (119) *tur-pi yuu wi-nmas ra nu-cki kumy*
 10017 GENR.POSS-elder.sibling GEN 3SG.POSS-husband PL 3PL.POSS-DAT also
 ‘*a-pi’ tu-kui-ti cti ma nu ma*
 10018 1SG.POSS-elder.sibling IPFV-GENR-say be.AFF:FACT LNK DEM apart.from
kupa kui-fse zaka wi-rmi me.
 Chinese SBJ:PCP-be.like each 3SG.POSS-name not.exist:FACT
 10019 ‘One calls one’s sister’s husband (and others from his family) ‘my elder
 10020 brother’, there are no other special terms as in Chinese.’ (140425
 10021 kWmdza05)
- 10022 (120) *kuteu kumy nuu juu-fse, juufcundzi ra kui-xteu~xtci*
 here also DEM SENS-be.like a.few.days.ago PL SBJ:PCP-EMPH~be.small
 10023 *ty-yyndzo kui-fse ri, cyxco tce*
 AOR-be.cold SBJ:PCP-be.like LNK the.last.days LNK

- 10024 *kui-xtciu~xtci* *nur-zi* *kuny-fse*
 SBJ:PCP-EMPH~be.small SENS-subside SBJ:PCP-be.like
- 10025 ‘It is like that here too, a few days ago the weather became a little cold,
 but the last days it has eased a bit.’ (conversation, 141027)
- 10027 (121) *maldzuu* *nii*, *nii* *ui-t^hycu* *tsa* *ri* *kuny-y^hzu*.
 plant.name DEM DEM 3SG.POSS-downstream a.little LOC also exist:SENS
 10028 *qaryypyt* *ui-rca* *ri* *kuny-tu-łob* *nii-nu*.
 plant.name 3SG.POSS-among LOC also IPFV-come.out SENS-be
- 10029 ‘The *maldzuu* plant, it is also found in places of slightly lower altitude, but
 10030 grows also in the same places as *qaryypyt* plants.’ (18-qromJoR, 81-82)
- 10031 (122) *kukutcu ftcyx^hcy* *kuny <baonuanyi>* *tu-tui-ŋge*
 here mid.summer also warm.clothes IPFV-2-wear[III]
 10032 *pui-cti*.
 PST.IPFV-be.AFF
- 10033 ‘Here you were wearing warm clothes even in mid summer.’
 10034 (conversation, 141017)
- 10035 (123) *tce nutcu* *kuny ui-jas* *ui-ntsi* *ts^hpi*
 LNK DEM:LOC also 3SG.POSS-hand 3SG.POSS-one.of.a.pair staff
 10036 *pui-sytse*, *ui-jas* *ui-ntsi* *kui ts^hitsuku*
 IPFV-plant[III] 3SG.POSS-hand 3SG.POSS-one.of.a.pair ERG whatever
 10037 *pui-z-nyme* *q^he*,
 IPFV-CAUS-do[III] LNK
- 10038 ‘Even like that (despite the pain in her legs), she props herself with a
 10039 cane using one hand,(and does all kinds of things with her other hand)
 10040 (14-siblings, 52)
- 10041 Although *kuny* ‘also, even’ can be combined with most postpositions and re-
 10042 lator nouns as shown by the examples above, it is however incompatible with the
 10043 ergative *kui*. For instance, in (124), although the demonstrative pronoun *nura*
 10044 ‘they, those’ in the second clause is the subject of the transitive verb *ndza* ‘eat’, it
 10045 does not take the ergative *kui* as would be expected (§8.2.2.1). The same applies
 10046 to *ui-zda ra* ‘his companions’, subject of the transitive verb *na-mu-çar-mu* ‘they
 10047 looked for themselves’ in (125),

9 The noun phrase

- 10048 (124) *wi-pui nura li ju-yi-nui q^he, nura kuny*
 3SG.POSS-young DEM:PL again IPFV-come-PL LNK DEM:PL also
 10049 *yui-tu-ndza-nui.*
 CISL-IPFV-eat-PL
 10050 ‘Its cubs also come and they too eat it.’ (20-sWNgi, 59-60)
- 10051 (125) *wi-zda ra kuny nui-rzaβ tuka*
 3SG.POSS-companion PL also 3SG.POSS-wife each
 10052 *na-nui-car-nui jui-ŋu*
 AOR:3→3'-AUTO-search SENS-be
 10053 ‘His companions also took each a wife for himself (among the women of
 10054 the island).’ (2005 Norbzang, 44)

10055 The combinations †*kuu kuny* or †*kuny kuu* are unattested, and not accepted by
 10056 native speakers. The contrast between absolute and ergative noun phrases is
 10057 therefore neutralized in additive or scalar focus with *kuny*. Note that other focus
 10058 markers, such as *ri* and *tci* (see 127 in §9.1.6.2) differ from *kuny* in this regard.

10059 Four pieces of evidence converge to suggest that the first syllable of *kuny* is
 10060 historically related to the ergative postposition *kuu*: (i) the incompatibility of co-
 10061 occurrence of *kuny* and *kuu*; (ii) the stress on the first syllable in *kúny*; (iii) the
 10062 similar *-ny* element in the other scalar focus marker *ciny* ‘(not) even one’ (§9.1.6.4)
 10063 (iv) the existence of the linker *ny*, possibly of Tibetan origin (§8.2.6). A detailed
 10064 examination of this topic is however impossible on the basis Japhug-internal ev-
 10065 idence, and will require extensive syntactic comparison between Gyalrong lan-
 10066 guages.

10067 The adverb *tymtukuny* ‘specially, on purpose’ appears to be a lexicalized com-
 10068 bination of the noun *ty-mtu* ‘knot’ and the focus marker *kuny*.

9.1.6.2 Correlative additive focus markers *ri* and *tci*

10069 The additive focus markers *ri* and *tci* are used in enumerations, repeated after
 10070 each noun referring to members of a group, to focus on the fact that their refer-
 10071 ents share a common property (or properties that are semantically close enough),
 10072 as in (126) (see additional examples in Jacques 2014a: 313–314).⁷

⁷In addition to their uses in the noun phrase presented in this section, *ri* and *tci* can also have scope over verbs, as discussed in §25.6.2.2.

- 10074 (126) *nqiaβ* *tci tu-tob* *c^ha*,
dark.side.of.the.mountain also IPFV-come.out can:FACT
 10075 *zruu* *tci tu-tob* *c^ha*,
sunny.side.of.the.mountain also IPFV-come.out can:FACT
 10076 ‘It can grow in both the dark and the sunny sides of the mountains.’
 10077 (17-thowum, 14)

10078 The correlative focus markers *ri* and *tci* can occur after any noun phrase or
 10079 postpositional phrase, including with the ergative *kuu* as shown by (127), unlike
 10080 the marker *kunr* ‘even, also’ (see examples 124 and 125, §9.1.6.1).

- 10081 (127) *pas kuu tci ndze*, *nuŋa kuu tci ndze*, *jla kuu*
 pig ERG also eat[III]:FACT cow ERG also eat[III]:FACT hybrid.yak ERG
 10082 *tci ndze*.
 also eat[III]:FACT
 10083 ‘Pigs eat it, cows eat it, hybrid yaks eat it.’ (18-NGolo, 171)

10084 They can have scope over only part of the noun/propositional phrase, and
 10085 even on the relator nouns as in (128).

- 10086 (128) *syste^ha ui-ŋguu* *tci yyzu*, *syste^ha ui-tas* *tci*
 ground 3SG.POSS-inside also exist:SENS ground 3SG.POSS-inside also
 10087 *zo yyzu*
 EMPH exist:SENS
 10088 ‘It is found both inside the ground, and on the ground.’ (25-GdAso, 17)

10089 Alternatively, it is possible to enumerate several properties of the same referent
 10090 using *ri* (this usage is not found with *tci*), but that marker still follows the
 10091 noun phrase. In this case the referent cannot be elided, and must be repeated in
 10092 both clauses, at least as a third person pronoun *wzo* as in (130).

- 10093 (129) *p^haergot numuu wzo ri pjy-rzi*, *wzo ri pjy-ts^hu* *tce*
 boar DEM 3SG also IFR.IPFV-be.heavy 3SG also IFR.IPFV-be.fat LNK
 10094 ‘The boar, it was heavy and fat.’ (140428 yonggan de xiaocafeng-zh, 244)

10095 This construction can be relativized with internally-headed relative clauses in
 10096 apposition, keeping the third person *wzo* as a resumptive pronoun (§23.3.1).

10097 The correlative construction can involve the possessor of an inalienably pos-
 10098 sessed noun, as in (130), where in the first clause the referent ‘the girl’ is pos-
 10099 sessor of the intransitive subject (literally ‘her age was small’) and in second it
 10100 corresponds to the intransitive subject, realized as a third person pronoun *wzo*
 10101 ‘she’.

9 The noun phrase

- 10102 (130) *tc^heme nuu u-luz ri pjy-xtci, wzo ri*
 girl DEM 3SG.POSS-age also IFR.IPFV-be.small 3SG also
 10103 *pjy-mpcyr,*
 IFR.IPFV-be.beautiful
 10104 ‘The girl was young and beautiful.’ (150909 hua pi-zh, 10)

10105 More complex correlations, involving different subjects and predicates related
 10106 to another referent, are also possible as shown by example (131), where *ri* occurs
 10107 after the intransitive subject *tuu-ci* ‘water’, after the transitive subject *lulu* ‘cat’
 10108 with the ergative and after the finite verb *tu-ce* ‘it goes up’.

- 10109 (131) *<yancong> ku-kui-rylob tce uu-tas*
 chimney IPFV-GENR:S/O-make.a.nest LNK 3SG.POSS-on
 10110 *tuu-ci ri müj-yi lulu kuu ri*
 INDEF.POSS-water also NEG:SENS-come cat ERG also
 10111 *muu-jú-wy-caβ qapri tu-ce ri müj-c^ha tce*
 NEG-IPFV-INV-catch snake IPFV:UP-go also NEG:SENS-can LNK
 10112 ‘(The sparrows) make their nest in the chimney, (because) water cannot
 10113 come up there, the cats cannot catch them, and the snakes cannot go up
 10114 there.’ (22-kumpGatCW, 69)

10115 The marker *ri* is homophonous with the locative *ri* (§8.2.4), and in cases with
 10116 an enumeration of locative adjuncts, there can be ambiguity between the two. In
 10117 (132), *ri* is analyzed as a locative because of the position of the determiner *ci*, and
 10118 also because it can be replaced with other locative postpositions.

- 10119 (132) *χc^ha ri ci, uu-be ri ci ui-jme*
 right LOC one 3SG.POSS-left LOC one 3SG.POSS-tail
 10120 *c^huu-łor juu-ŋu.*
 IPFV:DOWNSTREAM-come.out SENS-be
 10121 ‘It has one tail on the right, and one on the left.’ (26-qro, 116)

10122 9.1.6.3 Incremental additive

10123 Three markers are used to express the meaning ‘not only X, but also Y’, where X
 10124 and Y stand for noun phrases: *yo alala ri/ma* (133), *myra ma* (134) and *uu-t^hjuu tce*.⁸

⁸The etymology of these markers is discussed in §25.6.2.3.

- 10125 (133) *tce numura bo alala ri uzo syz kur-xtci pya*
 LNK DEM:PL ADVERS not.only LNK 3SG COMP SBJ:PCP-be.small bird
 10126 *nura kumy ku-ndym q^he tu-ndze*
 DEM:PL also IPFV-take[III] LNK IPFV-eat[III]
 10127 ‘Apart from those, (the eagle) also catches birds that are smaller than
 10128 itself and eats them.’ (19-qandZGi, 19)

10129 The combination of these markers with the scalar focus marker *ciny* ‘(not)
 10130 even one’ (§9.1.6.4) on the second noun phrase means ‘not even X, let alone Y’,
 10131 as shown by (134).

- 10132 (134) *wi-ky-p^ha_B myra ma, wi-ky-skra_B ciny*
 3SG.POSS-head-half not.only LNK 3SG.POSS-head-fine.hair not.even.one
 10133 *zo mur-ja-su-zyut nui-ŋu*
 EMPH NEG-AOR:3SG→3-CAUS-arrive SENS-be
 10134 ‘(This time, the horse) did not even bring back one fine hair from the
 10135 (evil woman’s) head, let alone half her head.’ (Kunbzang, 428)

10136 These three markers also occur as clausal subordinators (§25.6.2.3).

10137 9.1.6.4 Scalar focus marker *ciny*

10138 The focus marker *ciny* ‘(not) even one’ exclusively occurs with a negative verb.
 10139 Like *kumy* ‘also, even’, this marker has stress on the first syllable *ciny* (§3.7), which
 10140 is obviously related to the numeral *ci* ‘one’ (§7.1.1, §9.1.4.1).

10141 The marker *ciny* has scope over the constituent that immediately precedes it,
 10142 generally a noun phrase including or consisting of a counted noun, as in (135),
 10143 but also headless participial relative clauses as in (136), and (137).

- 10144 (135) *tsuku kuu q^he tui-rdo_B ciny my-kui-mto tu.*
 some ERG LNK one-piece even NEG-SBJ:PCP-see exist:FACT
 10145 ‘There are some people who (cannot) even find a single one.’
 10146 (20-grWBgrWB, 36)

- 10147 (136) *ma tce jinde nui zruuy ky-mto ciny mage.*
 LNK LNK nowadays DEM louse OBJ:PCP-see even not.exist:SENS
 10148 ‘Nowadays there isn’t even a single louse to be seen/one cannot even
 10149 see a single louse.’ (21-mdzadi, 77)

9 The noun phrase

- 10150 (137) *wi-rja* *wi-kui-ru* *ciny zo* *pjy-me*
 3SG.POSS-face 3SG.POSS-SBJ:PCP-look even EMPH IPFV.IFR-not.exist
 10151 ‘Not even one (of the thieves) looked at it/The (thieves) did not even so
 10152 much as looked at it.’ (140426 luozi he qiangdao, 30)

10153 It is also possible to have both a headless relative clause and the counted noun
 10154 *tui-rdo&* combined with *ciny* as in (138).

- 10155 (138) *tce wi-nuu-kui-yy-rkun* *nui nuu-dyn* *ma*
 LNK 3SG.POSS-IPFV-SBJ:PCP-CAUS-be.few DEM SENS-be.many LNK
 10156 *lu-kui-pya&* *nui tui-rdo& ciny zo* *maje*
 IPFV:UPSTREAM-SBJ:PCP-plough DEM one-piece even EMPH not.exist:SENS
 10157 ‘A lot of people diminish their fields, and not a single of them opens new
 10158 fields.’ (150903 friche, 6)

10159 In the case of relative clauses before *ciny*, there is some ambiguity as to whether
 10160 the scope of the focus marker is on the head of the relative or on the main verb
 10161 of the relative clause, hence the two proposed translations above for (136) and
 10162 (137).

10163 It is not possible to use *ciny* with scope over transitive subjects, followed by
 10164 the ergative.

10165 The form *ciny* also occurs in the expression *yu ciny ma& kui* ‘in any case it is
 10166 not’, as in (139), literally ‘It is not even the case that...’ ; in this construction, only
 10167 the first verb *yu* ‘be’ receives person indexation, as shown by (140). In addition to
 10168 *yu* ‘be’, a few other verbs such as *fse* ‘be like’ can occur with *ci ny ma& kui* ‘anyway
 10169 X does not’ .

- 10170 (139) *qajdo kui tc^{hi} my-nuu-ti* *cti* *ny, a-ty-nuu-ti*
 crow ERG what NEG-AUTO-say:FACT be.AFF:FACT LNK IRR-PFV-AUTO-say
 10171 *ma yu ciny ma& kui, nuu syzny kui-scui-scit*
 LNK be:FACT even not.be:FACT SFP DEM COMP SBJ:PCP-EMPH~happy
 10172 *ryzi-tci*
 stay:FACT-1DU
 ‘What would not a crow say (a crow tells only lies), let it say as it wants,
 10173 in any case it is not (true), let us rather live (together) happily.’
 10174 (28-qAjdoskAt, 25-26)

- 10176 (140) *kui-murkui yu-a ciny ma& kui*
 SBJ:PCP-steal be:FACT-1SG even not.be SFP
 10177 ‘Anyway it is not me who is the thief’ (elicited)

10178 9.1.6.5 Restrictive focus

10179 The most common way to express restrictive focus in Japhug is to combine the
 10180 exceptive *ma* ‘apart from’ (and its reduplicated variant *muma* §8.2.8) with a nega-
 10181 tive predicate. This can be a verb with a negative prefix as in (141), or a negative
 10182 existential verb as in (142).

- 10183 (141) *χsy-rzab ma mui-pu-tsua jny-suoso ri χsu-xpa*
 three-day apart.from NEG-AOR-pass-1SG IFR-think LNK three-year

10184 *pjx-tsua tce,*
 IFR-pass LNK

10185 ‘He thought that he had spent only three days, but three years had
 10186 passed.’ (2011-4-smanmi, 178)

- 10187 (142) *rkoŋjyl nuunu, u-mi u-ntsi nu*
 one.legged.demon DEM 3SG.POSS-leg 3SG.POSS-one.of.a.pair DEM

10188 *ma me kbi.*
 apart.from not.exist:FACT HEARSAY

10189 ‘It is said that one-legged demons only had one leg.’ (140510 rkoNJAl, 4)

10190 In the case of restrictive focalization on locative or temporal phrases, the ter-
 10191 minative *mxctṣa* ‘until’ (§8.2.9) occurs instead of the exceptive.

- 10192 (143) *nunutcu mxctṣa mtsʰalu pjx-me qʰe*
 DEM:LOC until nettle IFR.IPFV-not.exist LNK

10193 ‘It was only there that there was nettle.’ = ‘There was no nettle until
 10194 there.’ (140520 ye tian'e-zh, 319)

10195 The restrictive focus construction implies the presence of a noun phrase with
 10196 a numeral or a counted noun when the restriction bears on the quantity as in
 10197 (141) and (142) above, but restriction can also be qualitative, without quantifier,
 10198 as in (144).

- 10199 (144) *u-mat nuunu na-lxt cimuma ny*
 3SG.POSS-fruit DEM AOR:3→3'-throw just LNK
- 10200 *kuu-ndui~nduiβ zo ma me, karyi zo*
 SBJ:PCP-EMPH~small EMPH apart.from not.exist:FACT turnip.seed EMPH
- 10201 *kuu-fse ma me*
 SBJ:PCP-be.like apart.from not.exist:FACT
- 10202 ‘When the fruit of (*xanthoxylum*) has just come out, there is only
 10203 something very small, only like a turnip seed.’ (07-tCGom, 7)

9 The noun phrase

10204 The restrictive focus construction can be combined with a scalar focus in *kuny*
 10205 (see §9.1.6.1), as in (145). In this example, *kuny* has scope over the subordinate
 10206 clause *stusti ma kuu-me*, which is ambiguous between a participial headless rela-
 10207 tive (§23.4.1) ‘consisting of only a female all alone’ and a manner infinitival clause
 10208 (§25.4.2; in this case the gloss of *kuu-me* would be INF:STAT-not.exist) ‘even (when)
 10209 there is only a female all alone’.

- 10210 (145) *mu ma, stusti ma kuu-me kuny*
 10211 female apart.from alone apart.from SBJ:PCP-not.exist also
 10211 *c^hwi-rvngwum nu-cti.*
 10212 IPFV-lay.eggs SENS-be.AFF
 10212 ‘Even only a female (hen) alone does lay eggs.’ (150819 kumpGa, 11)

10213 A second possibility to express restrictive focus is the use of the adverb *vja*
 10214 ‘completely’, ‘all’ (§22.2.2.3) with scope over a noun phrase rather than the whole
 10215 clause as in (147).⁹

- 10216 (146) *alo mbroxpa ra tce tce nyki qra c^ho qambruu ra*
 10217 upstream nomad PL LNK LNK FILLER female.yak COMIT male.yak PL
 10217 *yuu nu-yli numui tce nuu tu-wum-nuu, tu-suuy-rom-nuu*,
 10218 GEN 3PL.POSS-dung DEM LNK DEM IPFV-gather-PL IPFV-CAUS-be.dry-PL
 10218 *mbroxpa svtc^ha tce stymku vja nu-cti ma si*
 10219 nomad place LNK grassland completely SENS-be.AFF LNK tree
 10219 *maje tce tce*
 10219 not.exist:SENS LNK LNK
 10220 ‘Upstream, in the nomad areas, they gather and dry yak dung, as in
 10221 nomad places there is only grassland, there are no trees.’ (05-tamar, 7-10)

10222 The adverb *vja* (here used rather as a noun modifier) is related to the denominal
 10223 verb *avja* ‘be bald, be bare’ (see §20.2.1 on the *a-* derivation), which can be applied
 10224 to nouns such as *stymku* ‘grassland’ and *zgo* ‘mountain’.

- 10225 (147) *qajuu vja tu-nuu-ndze, ma nuu ma*
 10226 bug completely IPFV-AUTO-eat[III] LNK DEM apart.from
 10226 *tx-rvku kuu-fse ra ndze*
 10226 INDEF.POSS-harvest SBJ:PCP-be.like PL eat[III]:FACT

⁹The form *vja* possibly originates from the first syllable of Tibetan གྱା.ମା *gia.ma* ‘stone slab’, through a meaning ‘bare rock’.

10227 *my-ŋgryl.*

NEG-be.usually.the.case:FACT

10228 ‘It only eats insects, it does not eat cultivated plants.’ (140511
10229 qamtsWrmdzu, 16)

10230 While in (147) and (146) we lack decisive evidence that *ŋja* forms a syntactic
10231 constituent with the previous nouns or the following verb, in (148) the presence
10232 of the ergative makes it clear that *ŋja* is not a clausal adverb, and belongs to the
10233 postpositional phrase headed by *kui*.

10234 (148) [ty-lu c^ho tukrimgo ŋja kui]

INDEF.POSS-milk COMIT doughnut completely ERG

10235 c^hui-z-yy-wxti-nuu.

IPFV-CAUS-CAUS-be.big-PL

10236 ‘They (used to) raise up (the babies) by feeding them milk and
10237 doughnuts only.’ (140426 tApAtso kAnWBdaR, 102)

10238 The same applies to (149), where the presence of the demonstrative *nui* after
10239 *ŋja* shows that it belongs to the same noun phrase.

10240 (149) u-rdo_ε nui-me tce, [u-ru ŋja nui],

3SG.POSS-grain AOR-not.exist LNK 3SG.POSS-stalk completely DEM

10241 pu-ky-tvβ nui, taŋndzyr u-ŋgwa

AOR-OBJ:PCP-thresh DEM feeding.emmer 3SG.POSS-inside

10242 tú-wy-rku tce,

IPFV-INV-put.in LNK

10243 ‘When all the grains have been removed, the bare stalks, the one that
10244 have been threshed, one puts them in a feeding emmer.’ (140513 tWrtsi,
10245 5)

10246 A reduplicated emphatic form *ŋju~ŋja* is also found as in (150)

10247 (150) χtcynzyn ŋju~ŋja kui zo púu-wy-nyjo cti

beast EMPH~completely ERG EMPH PST.IPFV-INV-wait be.AFF:FACT

10248 *nui-ŋju.*

SENS-be

10249 ‘It was all wild beasts waiting for him (there).’ (2005 Norbzang, 308)

10250 A third option to express restrictive focus is the inalienable noun *u-jlu*, which
10251 is used in the meaning ‘uncooked’ as a property noun (§5.1.2.7), but has become

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grammaticalized as a restrictive marker ‘exclusively, without anything else’ (presumably from an intermediate meaning ‘plain, simple’), as in (151).

- (151) *srvz nuu kuu tc^hoz uu-jlu zo pjua-nuujyntyn pua-cti ma juam nuu mu-pjy-car puu-ηu,*
prince DEM ERG religion 3SG.POSS-exclusively EMPH IPFV-be.assiduous.in
PST.IPFV-be.AFF LNK wife DEM NEG-IFR.IPFV-look.for SENS-be
‘The prince was focused exclusively in the study of religion, and was not looking for a wife.’ (stras2003, 3)

For the expression of restrictive focus with temporal noun phrases or clauses, the postposition *kóbmuz* ‘only after’ can also be used, especially with the demonstrative in the expression *nuu kóbmuz ny* ‘only then’ (§8.2.11, §25.3.3.2).

9.1.7 Identity modifiers

There is no specific identity modifier ‘the same’ in Japhug. The only way to express this meaning is to use the subject participle of the verb *naχtçuy* ‘be the same’ (a denominal verb of Tibetan origin, §7.1.6.1, see also §8.2.5 and §26.3.1.1 on the syntax of this stative verb) in a relative clause, as in (152) (a possessor relative, §23.5.10). This participle competes with the borrowed identity adverb *anamana* ‘identical’ (§22.2.3).

- (152) *tx-rmi kuu-naχtçuy pjy-dyn wo kymjuu, nyki kuruu ra tce.*
INDEF.POSS-name SBJ:PCP-be.the.same IFR.IPFV-be.many SFP TOPO
FILLER Tibetan PL LNK
‘There were many people who had identical names, in Kamnyu, among the Tibetans.’ (140522 tshupa, 161)

There are two prenominal modifiers expressing non-identity in Japhug: *kumaz* ‘other’ and the numeral *ci* ‘one’, which in prenominal position means ‘the other one’ (in postnominal position, it is used as an indefinite determiner, see §9.1.4.1). Both of these words can also be used as pronouns, though *ci* requires to be combined with the demonstrative *nuu* in this usage (see §6.8).

The modifier *kumaz* is prenominal in its meaning ‘other’, as in (153).

- 10278 (153) *tuu-zda* *nui ma* *kumab turme a-pui-me*
 GENR.POSS-companion DEM apart.from other person IRR-IPFV-not.exist
 10279 *tce, k^ha ra a_yndundyt nui-_y<nu_y>yro nui-_y nui-ti.*
 LNK house PL everywhere IPFV-<AUTO>play SENS-be SENS-say
 10280 ‘(Our neighbour) says that if there are no other persons apart from
 10281 family members, (the monkey) would play everywhere in the house.’
 10282 (19-GzW2, 10)

10283 There are apparent examples of *kumab* ‘other’ in postnominal position, as in
 10284 (154) and (155), but in such sentences *kumab* is a preverbal adverb, not a noun
 10285 modifier, with a slightly different meaning ‘anew’. In (154), the usage of *kumab*
 10286 is very similar to its Chinese equivalent 另外 <lìngwài> ‘other’ in the corres-
 10287 ponding Chinese sentence 阿兰另外给我买了一部手机, where the preverbal
 10288 position of 另外 <lìngwài> ‘other’ clearly shows that it is not a noun modifier.

- 10289 (154) <*alan*> *kui a-<dianhua>* *kumab ta-χtui*
 ANTHR ERG 1SG.POSS-phone other AOR:3→3'-buy
 10290 ‘Alan bought me a new phone.’ (conversation, 17-03-27)
- 10291 (155) *a-βi* *kui k^ha kumab ta-nui-sui-βzu*
 1SG.POSS-younger.sibling ERG house other AOR:3→3'-AUTO-CAUS-make
 10292 *q^he,*
 LNK
 10293 ‘My brother made himself a new house.’ (14-siblings, 304)

10294 The identity determiner *kumab* ‘other’ is grammaticalized from the subject
 10295 participle of the verb *ma* ‘not be’, *kui-ma* ‘who/which is not X’ (see also §16.1.1.7),
 10296 which is still widely used, as in (156) and (157).

- 10297 (156) *m_yzui [tc^hirtsym kui-ma]* *nunui tce, tú-wy-χtci ma nui*
 yet type.of.tsampa SBJ:PCP-not.be DEM LNK IPFV-INV-wash LNK DEM
 10298 *ma ky-sqa (m_y-ra)*
 apart.from INF-boil NEG-be.needed:FACT
 10299 ‘The tsampa that is not ‘chu.rtsam’, one needs to wash it, but not to boil
 10300 it.’ (2002tWsqr, 112)
- 10301 (157) *[u-rkui wuma zo st^huci kui-ma]* *nuitcu*
 3SG.POSS-side really EMPH so.much SBJ:PCP-not.be DEM:LOC
 10302 *tx-ri ci kú-wy-lxt*
 INDEF.POSS-thread once IPFV-INV-throw
 10303 ‘One sews a thread at a place which is not too much on the border (of

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10304 the patch). (12-kAtsxWb, 16)

10305 The modifier *ci* differs from *kumas* in that it is necessarily definite, meaning
10306 ‘the other one’, as in (158), where it refers to an animal that is chased by lions,
10307 which was previously mentioned in the text.

10308 (158) *zuruzyri q^he ci ruidab nuu duuxpa ma*
progressively LNK other.one animal DEM poor.of LNK
10309 *nuu-ky-ndza uu-spa jnuu-cti q^he, q^he*
3PL.POSS-OBJ:PCP-eat 3SG.POSS-material SENS-be.AFF LNK LNK
10310 *pjuu-ndzaβ q^he muu-jnuu-c^ha q^he,*
IPFV-ANTICAUS:make.fall LNK NEG-IPFV-can LNK
10311 ‘The other animal, poor of him, it is their prey, progressively it falls
10312 down and cannot stand it anymore.’ (20-sWNgi, 43)

10313 Interestingly, the determiner *ci* does not have scope over other noun modi-
10314 fiers. For instance, in (159), the noun *tc^heme* ‘woman’ occurs with an attributive
10315 adjective in participial form *kuu-γyn* ‘who is evil’ (a relative clause, see §9.1.8),
10316 but the meaning is not ‘the other evil woman’ as could have been expected (this
10317 interpretation is excluded since the woman who is the subject of the sentence is,
10318 by contrast, a kind person), and rather must be ‘the other woman, the evil one’.
10319 There is no pause in the recording that could lead us to suppose that *kuu-γyn* here
10320 is an apposition – it is rather a postnominal relative.

10321 (159) *nyki, tc^heme nuu uu-cki uu-kuu-syja jo-ce,*
FILLER women DEM 3SG-DAT 3SG.POSS-SBJ:PCP-give.back IFR-go
10322 *ci tc^heme kuu-γyn nuu uu-cki.*
other.one woman SBJ:PCP-be.evil DEM 3SG-DAT
10323 ‘She went to give it back to the woman, the other one, the evil woman.’
10324 (140515 jiesu de laoren-zh, 90)

10325 9.1.8 Attributes

10326 Japhug has several sub-parts of speech which could be described as ‘adjectives’: 10327 stative verbs, adverbs and nouns which express properties (rather than actions
10328 or entities). Property words used as noun modifiers are collectively designated
10329 by the term *attributes*. This heterogenous class excludes the property nouns de-
10330 scribed in §5.1.2.7, which are the syntactic heads of the noun phrase.

10331 Three types of attributes are distinguished: attributive postnominal (noun or
10332 adverb) modifiers, prenominal modifiers and participial *kuu-* relatives (mainly

10333 postnominal or head-internal). The constructions mentioned in this section are
 10334 all described in more details elsewhere in the grammar, and for this reason the
 10335 discussion is kept brief.

10336 **9.1.8.1 Attributive postnominal modifiers**

10337 In addition to the postnominal markers studied above (numeral and number
 10338 §9.1.1, demonstratives §9.1.2, quantifiers §9.1.3, definiteness markers §9.1.4.1, topic
 10339 and focus markers), there are a certain number of nouns that can serve as post-
 10340 nominal modifiers.

10341 The terms *təʰeme* ‘girl’ and *tr-tçu* ‘son’, ‘boy’ can be used as modifiers to specify
 10342 the gender of a person, in particular in combination with gender-neutral kinship
 10343 terms such as *tr-ftsa* ‘sister’s child’ or relative age sibling terms (§27.2.2.2).

10344 Some compound nouns occur as postnominal modifiers, specific to a particular
 10345 head-noun, for instance *tʰylwṛçtṣat* ‘sparing earth’ or *rnyftçwṛχa* ‘whose ear has
 10346 ten holes’, used as attributes of *qandze* ‘earthworm’ (example 107, §5.5.2) and
 10347 *qala* ‘rabbit’ (§5.5.1), respectively. Some compounds from Tibetan such as the
 10348 nouns of the twelve year cycle (such as *stašlu* ‘year of the tiger’ from རྩଣྡྱྤྲྷ stag.lo
 10349 ‘year of the tiger’ in 160) also occur postnominally.

- 10350 (160) *tcelo prymzi rgvtpu yuu uu-ye stašlu ci*
 upstream ANTHR old.man GEN 3SG.POSS-grandchild tiger-year INDEF
 10351 *yʂzu tce,*
 exist:SENS LNK

10352 ‘Up there, the old Bramze has a grandchild who is born in the year of
 10353 the tiger.’ (2003nyima2, 48)

10354 Pritative nouns in *-lu* ‘...less’ (§5.7.1) and nouns of relative location in *mav-*
 10355 (§5.7.2) are mainly used as postnominal modifiers.

10356 The nouns *χcʰa* ‘right’ and *ve* ‘left’ are mainly used with the noun *jav* ‘hand’,
 10357 ‘arm’ (or with other paired body parts), and can either be used as pre- (161) or
 10358 postnominal modifiers (§162).

- 10359 (161) *ve a-jav tu-ntcʰoz-a ḷu*
 left 1SG.POSS-hand IPFV-use-1SG be:FACT
 10360 ‘I use my left hand.’ (elicited)

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- 10361 (162) *tur-jas* *χc^ha nuu kuu, taqaβ c^ho* *ty-ri* *nuu*
 GENR.POSS-hand right DEM ERG needle COMIT INDEF.POSS-thread DEM
 10362 *tú-wy-ndo, tur-jas* *ve nuu kuu kr-çp^hyt*
 IPFV-INV-take GENR.POSS-hand left DEM ERG INF-patch
 10363 *w-spa* *nuu pjúi-wy-sui-st^hob* *ŋu*
 3SG.POSS-material DEM IPFV-INV-CAUS-press be:FACT
 10364 ‘One takes the needle and the thread with one’s right hand, and one
 10365 presses the (cloth) to be patched with the left hand.’ (12-kAtsxWb, 35)

10366 The word *wuma* ‘real, really’ from Tibetan ཡོ་མ་ ‘real, true’ (§3.3.1.4) is ge-
 10367 nerally used adverbially as an intensifier, in particular with stative verbs (§26.1.1.1),
 10368 but also occurs as a postnominal modifier meaning ‘real’, its original meaning,
 10369 as in (163) and (164).

- 10370 (163) *l̥yndzi wuma nuu nyzo juu-tui-ŋu ma azo l̥yndzi juu-ma-a*
 demon real DEM SENS-2-be LNK 1SG demon SENS-not.be-1SG
 10371 ‘You are the real demon, not me.’ (2002 lhandzi, 12)
 10372 (164) *wi-qa* *nuu qarje, tytsob* *wuma nuu.*
 3SG.POSS-root DEM be.yellow:FACT silverweed real DEM
 10373 ‘Its root is yellow, the real silverweed.’ (19-khWlu, 74)

10374 The inalienably possessed noun *nuu-tyngut* ‘common possession’, which re-
 10375 quires a non-singular possessor, can be used as a postnominal attribute, sharing
 10376 the same possessive prefix as the preceding noun, as in *nuu-rmi nuu-tyngut* ‘their
 10377 collective name’ in (165).

- 10378 (165) *nunuu tṣu nuu caŋtaš nunuu tcetu, (...) rüngu muu-tu-tay*
 DEM road DEM up.from up.there DEM pasture NEG-IPFV:UP-touch
 10379 *myctṣa, nunuu tuu-ji* *t^hamtṣt zo* *nuu-rmi* *nuu*
 until dem indef.poss-field all EMPH 3PL.POSS-name DEM
 10380 *tuturca nuu-rmi* *nuu tumju rmi.* *tceri tumju nunuu,*
 together 3PL.POSS-name DEM TOPO be.called:FACT LNK TOPO DEM
 10381 *nuu-rmi* *nuu-tyngut* *kui-fse* *ŋu.*
 3PL.POSS-name 3PL.POSS-in.common SBJ:PCP-be.like be:FACT
 10382 ‘Up from that path until the pasture, all the fields in there put together,
 10383 their collective name is *tumju*.’ (150903 tWmNu, 8)

10384 In addition, some adverbs, which are more often used with scope over the
 10385 whole clause, can occur as postnominal modifiers, in particular the comitative
 10386 adverbs (§5.8.1) and adverbs of quantification (§9.1.3).

9.1.8.2 Attributive prenominal modifiers

Noun phrases serving as prenominal modifiers are not easily distinguishable from possessors, the only difference being the absence of a coreferent possessive prefix on the following noun (§5.1.1.2).

The most common type of prenominal modifiers are placenames and other unpossessible nouns (§5.2.1) and nouns expressing the material from which an object is made, as *χsyr* ‘gold’, *rŋul* ‘silver’ and *si* ‘wood’ in (166).

- (166) *a-tycime, nyo rŋul rjyskxt ui-taꝝ tui-ce ci, χsyr rjyskxt ui-taꝝ tui-ce ci, com rjyskxt ui-taꝝ tur-nui-ce?*
 1SG.POSS-lady 2SG silver stair 3SG.POSS-on 2-go:FACT QU gold stair
 3SG.POSS-on 2-go:FACT QU wood stair 3SG.POSS-on 2-AUTO-go:FACT
 ‘My lady, will you go on the silver stairs, the golden stairs or the
 wooden stairs?’ (2014-kWLAG, 369)

Prenominal modifiers can be more complex phrases. In (167), the prenominal modifier *ckryz* ‘oak’ takes the restrictive focus marker *ŋja* ‘completely’ (§9.1.6.5).¹⁰

- (167) *nui [ckryz ŋja zo] sunguu nū tce*
 DEM oak completely EMPH forest be:FACT LNK
 ‘It is a forest exclusively of oaks.’ (140522 Kamnyu zgo, 91)

In (168), the prenominal modifier of *tſu* ‘path’ has three degrees of embedding.

- (168) *[[[smyt tuimda] rjylpu nura yui] nui-sakaβ] tſu nuiču*
 TOPO TOPO king DEM.PL GEN 3PL.POSS-well path DEM.LOC
ç-ky-ryzi nui-ŋu.
 TRAL-AOR-stay SENS-be
 ‘He went (there) and stayed on the way (to) the well of the king of
 Smad.mda.’ (2005 Kunbzang, 9)

When a prenominal modifier is present, possessive prefixes on inalienably possessed head noun can be neutralized to indefinite possessor (§5.1.4).

At least in the case of some prenominal modifiers limited to single nouns,¹¹ possessive prefixes can either be prefixed on the head noun (169a), or on the modifier (169b) (§5.1.4).

¹⁰ A superficially similar construction is found in 70 (§22.2.2.3); in that example, the constituent [noun+*ŋja zo*] is a preposed nominal predicate. That analysis is not possible in (167), since the subject is the demonstrative *nui*, and the nominal predicate is *ckryz ŋja zo sungu*.

¹¹ Attempts to test this possibility with larger prenominal phrases such as that in (167) are inconclusive.

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- 10412 (169) a. *χsyr a-kumtc^huu*
gold 1SG.POSS-toy
- 10413 b. *a-χsyr kumtc^huu*
1SG.POSS-gold toy
- 10414 ‘My golden toy’ (see example 64, §5.1.4)

10415 Since in (169) no stress can be heard on the modifier *χsyr* ‘gold’, it could be
10416 possible to argue that *χsyr kumtc^huu* in (169b) should rather be analyzed as a noun
10417 compound (§5.5.1) *χsyr-kumtc^huu*: this is one of the domains of Japhug grammar
10418 in which the boundary between syntax and morphology is unclear (§3.8.1).

10419 The adverb *koyla* ‘really, completely’ (§22.2.4) can be used as a prenominal
10420 modifier in the sense of ‘real’.

- 10421 (170) *koyla turme ci, kui-pu~pe tcheme ci, n̥-cya*
really person INDEF SBJ:PCP-EMPH~be.good girl INDEF 2SG.POSS-age
- 10422 *kui-xtcu~xtci kui-mpci~mpcyr a-nui-tui-aβzu*
SBJ:PCP-EMPH~be.small SBJ:PCP-EMPH~be.beautiful IRR-PFV-2-become
- 10423 *smulym*
prayer
- 10424 ‘May you become a real human, a nice, young and beautiful girl.’ (said to
10425 a râkshasî, Norbzang 2005, 287)

9.1.8.3 Participial relatives

10427 Most words expressing properties in Japhug are a subclass of stative verbs, and
10428 cannot serve as attributes without being embedded into a relative clause. Since
10429 intransitive subjects can only be relativized using *kui-* participial relative clauses
10430 (§16.1.1.4), attributive adjectival stative verbs are always in this form, as *kui-pe*
10431 ‘good one, which is good’ in (171); the relative *wuma zo tc^heme ku-pe* in this exam-
10432 ple is head-internal (§23.4.3), as shown by the position of the intensifier *wuma zo*
10433 (§26.1.1.1), and literally means ‘(a) woman who is/was really nice.’

- 10434 (171) *wu-rzaβ βdaβmu nuw [wuma zo tc^heme ku-pe] ci*
3SG.POSS-wife lady DEM really EMPH woman SBJ:PCP-be.good INDEF
- 10435 *pjy-ηu.*
IFR.IPFV-be
- 10436 ‘His wife, the queen, was a very nice woman.’ (28-smAnmi, 4)

10437 In the case of shorter relative clauses it is not always clear whether we have
10438 a head-internal, or a postnominal one (§23.4.4). Prenominal relatives with an

10439 adjectival stative verb such as *stu kuu-mna* ‘the best one, the leader’ in (172) are
 10440 less common.

- 10441 (172) *rjylpu nyruuβzanŋ nuu kuu, nyki, [stu kuu-mna tcʰeme] nuu*
 king ANTHR DEM ERG filler most SBJ:PCP-be.better woman DEM
 10442 *jny-nuu-car nuu-ŋu*
 IFR-AUTO-search SENS-be
 10443 ‘King Norbzang chose for himself the woman leader.’ (2012 Norbzang, 41)

10444 The presence of an adjunct, such as a standard marker, can disambiguate be-
 10445 between postnominal and head-internal relatives (§23.5.1.2); in (173) for instance,
 10446 the head *pya* ‘bird’ is clearly internal.

- 10447 (173) *βzar ndyre jyn ma [uzo sznŋ p̥ya kuu-xtci] nura*
 buzzard LNK be.evil:FACT LNK 3SG COMP bird SBJ:PCP-be.small DEM:PL
 10448 *βja zo tu-ndze nuu-ŋu tce,*
 completely EMPH IPFV-eat[III] SENS-be LNK
 10449 ‘The buzzard is fierce, its eats all the birds that are smaller than itself.’
 10450 (24-ZmbrWpGa, 88)

10451 As shown in §23.3.5.1, in head-internal relative clauses the same determiner
 10452 can appear on the head noun and repeated after the whole relative. The same is
 10453 found with adjectival participial relatives, as in (174) with the indefinite *ci* ‘one’,
 10454 though this usage is rare, in most cases only one of the two determiners is used
 10455 (either the one inside the relative or the external one).

- 10456 (174) *tce [qajuu ci kuu-yrŋi] ci ŋu.*
 LNK bug INDEF SBJ:PCP-be.green INDEF be:FACT
 10457 ‘It is a green/black bug.’ (26-zrWGndza)

10458 In prenominal position, subject relatives are almost not attested with stative
 10459 verbs, but are found with some intransitive dynamic verbs. In the lexicalized
 10460 expression in (175), prenominal placement of the participle *kuu-rlaꝝ* is required.

- 10461 (175) *kuu-rlaꝝ kʰa*
 SBJ:PCP-disappear house
 10462 ‘An abondonned house.’

9.2 Noun coordination

Japhug lacks a dedicated noun coordinator. Nouns can be either coordinated by using the comitative postposition *c^ho* (§9.2.1), or by juxtaposition without any linking element (§9.2.2).

9.2.1 Coordination or embedded phrase

The closest thing to a noun coordinator in Japhug is the comitative marker *c^ho*; it can be used both to connect finite clauses (§25.6.2.1) or nouns as in (176).

When the constituent comprising two noun phrases connected by *c^ho* is in subject or object function, number indexation on the verb reflects the sum of all individuals referred to by this coordinated constituent, dual in the case of (176).

- (176) [χpxltcin *c^ho* alan] *kua ko-ndo-ndzi tce*,
 n.p. COMIT n.p. ERG IFR-take-DU LNK
 ‘Dpalcan and Alan caught (one).’ (24-qro, 101)

Number markers like *ra* (§9.1.1.2) have scope over the whole coordinated constituent, as in (177).

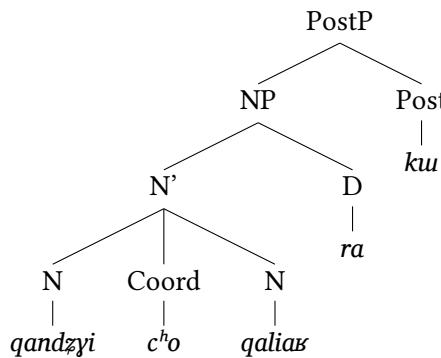
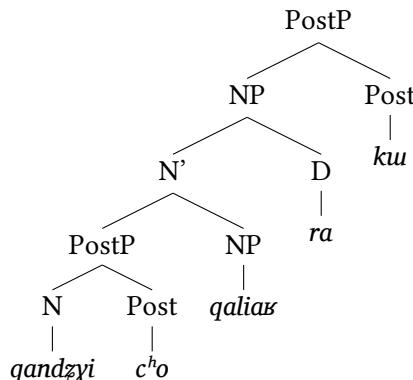
- (177) [*qandzyi c^ho qalias*] *ra kui c^huu-nuu-tsum-nuu tu-ndza-nuu* ηgryl.
 falcon COMIT eagle PL ERG IPFV:DOWNSTREAM-VERT-take.away-PL
 IPFV-eat-PL be.usually.the.case:FACT
 ‘Falcons and eagles take them (the moles) and eat them.’ (28-qapar, 201)

There is however evidence that *c^ho* is a postposition rather than conjunction. First, while *c^ho* cannot be used without a preceding noun phrase or clause, the noun following it (for instance, *qalias* ‘eagle’ in 177) is optional, as illustrated by (178) and several additional examples in §8.2.5.

- (178) *nua c^ho to-rustunmuu-ndzi*.
 [DEM COMIT] IFR-marry-DU
 ‘He married her.’ (140511 alading-zh, 191)

Second, the fact that the noun followed by *c^ho* is a constituent can be shown by the fact that it can be relativized with an oblique participle (§16.1.3.7).

For these reasons, rather than assuming a ‘flat’ structure as in Figure 9.1, I consider *qandzyi c^ho* to be a postpositional phrase used as an adnominal modifier of the noun *qalias* ‘eagle’, as in Figure 9.2.

Figure 9.1: *cʰo* as a coordinatorFigure 9.2: *cʰo* as a postposition

10491 **9.2.2 Bare coordination**

10492 **9.2.2.1 Enumeration**

10493 Enumerations are the listing of a series of nouns, often with a specific (rising)
10494 intonation and a pause between item, and without any coordinating element
10495 (such as the postposition *cʰo* seen above). In Japhug, quite lengthy enumerations
10496 are attested in the corpus, as shown by (179) with seven nouns.

- 10497 (179) *mbro, jla, nurna, mbala, tsʰyt, qazo, pas, nura nutcu*
 horse hybrid.yak cow bull goat sheep pig DEM:PL DEM:LOC
10498 *ŋja z-núi-wy-lx̥y pñu-ŋu.*
 completely TRAL-IPFV-INV-graze PST.IPFV-be
10499 'People used to graze there horses, hybrid yaks, cows, bulls, goats, sheep

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10500 ans pigs.' (140522 Kamnyu zgo, 156)

10501 Enumerations are generally understood as non-exhaustive, implying the po-
10502 tential inclusion of other referents to the list, especially when each noun occurs
10503 with the participle *kui-fse* ‘like’ as in (180).

10504 (180) *nunuu tx-mu* *nua kua qala kui-fse, ca*
10505 DEM INDEF.POSS-mother DEM ERG rabbit SBJ:PCP-be.like deer
10506 *kui-fse, nunuu ruudaa kui-xcti naura pjuu-sat.*
 SBJ:PCP-be.like DEM animal SBJ:PCP-be.small DEM:PL IPFV-kill
‘The mother kills small animals like rabbits or deer.’ (20-sWNgi, 80)

10507 However, enumerations with only two nouns and without specific intonation,
10508 as in (181), can also express exhaustive enumeration.

10509 (181) *qʰe tsʰyt qazo ra yuu nui-ndza nura pjuu-sna.*
10510 LNK goat sheep PL GEN 3PL.POSS-food DEM:PL SENS-be.good
‘It is good as fodder for goats and sheep.’ (16-RlWmsWsi, 65)

10511 When the order of the nouns is rigid (which is not the case in 181, since *qazo*
10512 *tsʰyt* ‘sheep and goats’ is also attested), the construction belongs to a different
10513 category: that of noun dyads (§9.2.2.2).

9.2.2.2 Noun dyads

10514 Noun dyads are a pair of nouns occurring in a fixed order, without intervening
10515 linker or postposition, and sharing their number and case markers. A good exam-
10516 ple is provided by the expression ‘parents’ comprising the kinship terms *tx-mu*
10517 ‘mother’ and *tx-wa* ‘father’, as in (182). Note that while number and case markers
10518 are shared by both nouns, each of them takes its own possessive prefix, and both
10519 prefixes are coreferent.

10520 (182) *nua a-mu a-wa ni yuu ju*
10521 DEM 1SG.POSS-mother 1SG.POSS-father DU GEN be:FACT
10522 ‘This is for my parents.’ (meimei de gushi)

10523 The dyad for ‘parents’ has a honorific variant, originally used for noblemen in
10524 the traditional society. It comprises the terms *tx-pa* ‘father’ and *tx-ma* ‘mother’,
10525 which are borrowed from Tibetan རྩ་པ་ *?apʰa* ‘father’ and རྩ་མ་ *?a.ma* ‘mother’, re-
10526 spectively. Interestingly, the honorific expression follows the ‘father-mother’ order
10527 (as in example 183), while the native one puts ‘mother’ in the first place.

- 10528 (183) *nur kur-fse a-pa a-ma ni kur*
DEM SBJ:PCP-be.like 1SG.POSS-father 1SG.POSS-mother DU ERG
10529 *nur-ti-ndzi tce*
SENS-say-DU LNK
10530 ‘My parents say this.’ (2003nyima2, 94)

10531 Other common dyads referring to humans, but alienably possessed, include
10532 *rgytpu rgynmuu* ‘old man(men) and woman(women)’, *tx-tcui tc^heme* ‘boy(s) and
10533 girl(s)’. They are most commonly used as collectives with indefinite referents
10534 as in (184), but are also attested with definite ones, as in (185), with the aforementioned
10535 topic marker *içq^ha* (§9.1.5.2).

- 10536 (184) *tx-tcui tc^heme tua-sy-ymdzuu zaka tu*
INDEF.POSS-son girl GENR.POSS-OBL:PCP-sit each EXIST:FACT
10537 ‘Gents and ladies each have (different) seating places.’ (31-khAjmu, 10)
- 10538 (185) *tx-rjit nua li içq^ha rgytpu*
INDEF.POSS-offspring DEM again the.aforementioned old.man
10539 *rgynmuu ni kuu pjy-mto-ndzi*
old.woman DU ERG IFR-see-DU
10540 ‘That child, the old man and the old woman saw him.’ (140514
10541 huishuohua de niao-zh, 4)

10542 Dyads are not restricted to humans, as shown by the dyad *txci qaj* ‘barley and
10543 wheat’ (18, §10.1.2.10).

10544 Another type of noun dyad comprises two abstract nouns, which can be used
10545 as manner adjuncts with the ergative (see example 46 §8.2.2.5) or in the degree
10546 construction as in (186) with the dyad *tx-re tx-jas* ‘chatting and laughing’ (only *tx-*
10547 *re* ‘laugh’ exists as an independent word). Some of these dyads are nominalized
10548 forms of bipartite verbs (§11.6.3).

- 10549 (186) *nutcu rcanuu maka tx-re tx-jas*
DEM:LOC UNEXP:DEG completely INDEF.POSS-laugh INDEF.POSS-laugh
10550 *pjy-saxas*
IFR.IPFV-be.extremely
10551 ‘There, (the râkshasî) were chatting and laughing a lot.’ (2011-05-nyima,
10552 34)

9.2.3 Disjunction

There is no dedicated linker for expressing inclusive and/or exclusive disjunction of noun phrases in Japhug. The clausal linker *numaṣṇy* ‘otherwise’ can exceptionally occur between nouns as in (187), but such rare constructions are the result of the elision of the non-final verb(s) in a string of clauses sharing the same verb forms such as (188) (§25.6.4).

- (187) *tce azo a-rj̥it nui kui a-wymua u-rj̥it nui*
 LNK 1SG 1SG.POSS-child DEM ERG 1SG.POSS-brother 3SG.POSS-child DEM
tce “a-rpu” numaṣṇy “a-taṣ” tu-ti ku-ra.
 LOC 1SG.POSS-MB otherwise 1SG.POSS-MZ IPFV-say SBJ:PCP-be.needed
 ‘Then my son has to say ‘my uncle’ or ‘my aunt’ to my brother’s son.’
 (140425 kWmdza04, 132)

- (188) *tx-ŋgyr lú-wy-lxt, nūmaṣṇy tx-ŋku*
 INDEF.POSS-fat IPFV-INV-release otherwise INDEF.POSS-pig.skin
lú-wy-lxt, nūmaṣṇy c̥yru lú-wy-lxt,
 IPFV-INV-release otherwise bone IPFV-INV-release
 ‘One puts pig fat, pig skin or bones in it.’ (140428 mtshalu, 19)

The reduced form *maṣ* (homophonous with the 3SG Factual non-past of *maṣ* ‘not be’) of *numaṣṇy* ‘otherwise’ is also attested to express disjunction between nouns as in (189).

- (189) *nūnua mbos maṣ tuwuar nui t^hú-wy-nq^hŋga tce*
 DEM square.cloth otherwise raincoat DEM IPFV-INV-put.on LNK
χchoqe nui u-j̥os nui kui kú-wy-sur-ndo.
 right.and.left DEM 3SG.POSS-hook DEM ERG IPFV-INV-CAUS-take
 ‘When one puts on a square cloth or a raincoat (to protect oneself from the rain), one attaches it with the hooks on the left and on the right.’
 (140429 NoR, 15)

Another way of expressing disjunction with nouns is the polar sentence final particle *ci* (§10.4.2) but the verb is repeated in both clauses with elision, as in (190).

- (190) *tua-tuap^hu ḡu ci bñua-tuap^hu ḡu my-xsi.*
 one-species be:FACT QU two-species be:FACT NEG-GENR:know
 ‘I dont know if it is one or two species.’ (23-RmWrcWftsa, 44)

9.3 Word order in the noun phrase

The order of the elements in the noun phrase in Japhug is relatively rigid. Examples of complex nouns phrases such as (191) and (192) illustrate the orders N(oun)-Adj(ective)-Num(eral) and Dem(onstrative)-N(oun)-Num(eral)-Dem(onstrative), respectively.¹²

- (191) *sungw_i zui, [t_urm_e wuma zo kui-wxti bnuaz] tu-ndzi tce*
 forest LOC people really EMPH SBJ:PCP-be.big two exist:FACT-DU LNK

'In the forest, there are two giants.' (140428 yonggan de xiaocafeng-zh, 171)

- (192) *[u_{ku}uki cnat bnuaz kuni] kui,*
 DEM.PROX heddle two DEM.PROX:DU ERG
 '(The weaving is done) with these two heddles.' (vid-20140429090403, 47)

From such examples, it can be extrapolated that the most basic word order in the noun phrase in Japhug is Dem-N-Adj-Num-Dem. Although no noun phrase in the corpus presents all five elements, it is easy to elicitate such an example. This order is not unusual crosslinguistically: Cinque (2005) notes that the orders Dem-N-Adj-Num and N-Adj-Num-Dem are both widely attested.

All of the elements in the noun phrases are optional, even the nominal head.

Although the indefinite marker *ci* 'one' and the topic *nuu* can appear between the noun and the adjective (being here a head-internal participial relative clause, §9.1.8.3), as shown by examples (174) above and (193) below, numerals are not attested in this position.

- (193) *yjw_i ci kui-mbw_u~mbro zo pjy-tu jwu-ŋu tce*
 watchtower INDEF SBJ:PCP-EMPH~be.high EMPH IFR.IPFV-exist SENS-be
 LNK
 'There was a very big tower.' (2012 Norbzang, 54)

There are other attributes than adjectival stative verbs in Japhug (§9.1.8.1 and §9.1.8.2), in particular prenominal attributes as *rjul* 'silver' in (194), but it is problematic to use such examples as evidence for a Adj-N-Num-Dem, given the fact that prenominal attributes are always essentially nouns used as modifiers.

¹²The term 'adjective' here refers to attributive adjectival stative verbs in participial form (§9.1.8.3).

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- 10606 (194) *rŋuł q^hoŋq^hob χsum nuŋ ny-nur-tob.*
silver ingot three DEM IFR-AUTO-come.out
10607 ‘The three silver ingots had come out.’ (28-qAjdoskAt, 178)
- 10608 The prenominal slot can be filled by demonstratives (§9.1.2) and identity mod-
10609 ifiers *kumax* ‘other’ or *ci* ‘the other one’ (§9.1.7). These elements can be preceded
10610 by either a comitative *c^ho* phrase (§9.2.1) or by the aforementioned topic marker
10611 *içq^ha* (§9.1.5.2, cf. example 195), the leftmost element of a noun phrase.
- 10612 (195) *rɟylpu u-tcua nua kua, icq^ha ci rɟylpu*
king 3SG.POSS-son DEM ERG the.aforementioned other.one king
10613 *nunua, <xila> rɟylpu nua u-cki,*
DEM TOPO king DEM 3SG.POSS-DAT
10614 ‘The king’s son (told) the other king, the king of Greece’ (140518 huifei
10615 de muma-zh, 177)

10 Expressive words and sentence final particles

10618 This chapter comprises four sections: §10.1 discusses ideophones, §10.2 presents
10619 expressive words lacking specific ideophonic properties (interjections and calling
10620 sounds), §10.3 and §10.4 describes sentence final particles and their contribution
10621 to the expression of modality and evidentiality.

10622 10.1 Ideophones

10623 Ideophones in Japhug constitute a particularly large part of speech, and can be
10624 unambiguously defined on the basis of morphological criteria. The present sec-
10625 tion builds on previous research (Sun & Shidanluo 2004; Jacques 2013c)), but is
10626 based on a larger corpus of ideophones.

10627 10.1.1 Ideophonic stem morphology

10628 Cross-linguistic definitions have been proposed for ideophones; for instance, ac-
10629 cording to Dingemanse (2017: 2), they are ‘marked words that depict sensory im-
10630 agery’. While Japhug ideophones do indeed fit this description, in this grammar
10631 a language-particular definition is adopted.

10632 Ideophones often have specific morphology, which differs from the rest of the
10633 lexicon (Diffloth 1976 and Zwicky & Pullum 1987). This is the case in Gyalrong
10634 languages (Sun & Shidanluo 2004: 3–4), and ideophones are thus defined in this
10635 grammar (following Jacques 2013c) as words derived from monosyllabic ideo-
10636 phonic roots that can undergo the morphological alternations described in this
10637 section.

10638 Table 10.1 presents the ten ideophonic patterns attested in Japhug. Since these
10639 patterns involve several types of partial reduplication, a set of symbols are used
10640 to represent the elements of the root that are targeted by reduplication: C_i rep-
10641 resents initial clusters (or single consonants), C_f codas, V the main vowel and R
10642 the complete ideophonic root.

Table 10.1: Ideophonic morphology in Japhug

	pattern	example	meaning
I	<i>R</i>	<i>zjaj</i>	semelfactive
II	<i>R.R</i>	<i>zjaj.zjaj</i>	stative
III	<i>R.nx.R</i>	<i>zjaj.nx.zjaj</i>	action with rhythm and/or motion
IV	<i>R.nx.IVC_f</i>	<i>zjaj.nx.laj</i>	action in disorderly fashion
V	<i>p^huu.R</i>	<i>p^huu.zjaj</i>	semelfactive, intensive
VI	<i>mrly.R</i>	<i>mrly.zjaj</i>	stative, intensive
VII	<i>Ruu.C_fi</i>	<i>zjajuu.yi</i>	progressive change of state
VIII	<i>C_iuuC_fuu.C_iaC_fi</i>	<i>zjuuju.zjani</i>	stative, in quantity, in disorder
IX	<i>Ri.nx.Ri</i>	<i>zjani.nx.zjaj</i>	action with fast motion
X	<i>RRR(*)</i>		onomatopoeia

This system is not specific to Japhug: patterns I, II, III, IV and VII have direct correspondences in Tshobdun (Sun & Shidanluo 2004: 3–4). Patterns V and VI express an intensive meaning in comparison with the corresponding semelfactive (pattern I) and stative (pattern II). No equivalent pattern exists in Tshobdun. The *-nx-* element in patterns III, IV and IX is related to the additive *nx* (§8.2.6).

All patterns (except X) are illustrated with an example using the root |*zjaj*| ‘tall’. Example sentences for each of these forms and more detailed accounts of their semantics are provided in §10.1.2.

10.1.2 Regular derivations

Although most ideophonic patterns are attested in the text corpus, it is difficult to find real examples of all regular derivations from one particular root. For ease of presentation, we cite example sentences with complex ideophones based on a single root, |*zjaj*| ‘tall’,¹ and thus most of these examples are elicited.² Ideophones are glossed by IDPH, followed by the number of the pattern, and a brief translation of the general meaning of the ideophonic root.

The basic meaning of the ideophonic root |*zjaj*| ‘tall’ was glossed by Tshendzin as (1).

¹This root is not used to illustrate pattern X (§10.1.2.10), which is semantically restricted.

²They are however not translated: I asked my main consultant Tshendzin to produce sentences illustrating each of the possible patterns of the root |*zjaj*|.

- 10660 (1) *uu-zda* *ra svz ku-mbro kur-fse*
 3SG.POSS-companion PL COMP SBJ:PCP-be.tall SBJ:PCP-be.like
 10661 ‘Taller or higher than the others.’ (elicited)

10662 There are additional ideophonic roots that are related to |*zjay*| by non-morphological
 10663 processes (Table 10.3, §10.1.5.3).

10.1.2.1 Pattern I

10665 Pattern I, which consists of the bare ideophonic root, is combined with predicates
 10666 in the Aorist or Inferential to express an action occurring suddenly, as in (2). The
 10667 form *zjay* means that the action of the sentence resulted in the main referent
 10668 becoming taller than its surrounding.

- 10669 (2) *zjay zo tx-ndzur*
 IDPH(I):tall EMPH AOR-stand
 10670 ‘He stood up suddenly, and (appeared to be) very tall.’ (elicited)

10.1.2.2 Pattern II

10672 Pattern II with plain reduplication indicates a state. It is by far the most com-
 10673 mon ideophonic pattern in texts and it is attested for most ideophonic roots. It
 10674 generally describes a permanent state (as in 4 below).

10675 When an ideophone in pattern II is used with a lexical verb, it can describe a
 10676 state resulting from the action indicated by the main verb (*rmbu* ‘pile up’ in 3).

- 10677 (3) *tce zjayzjay zo ku-pa to-rmbua-nu*
 LNK IDPH(II):tall EMPH INF:STAT-AUX IFR-pile.up-PL
 10678 ‘(The villagers) had piled (the hay) up very high.’ (150902 liaozhai lang-zh,
 10679 26)’

10680 A handful of deideophonic verbs in *a-* and *nr-* can be built from pattern II
 10681 ideophones (§20.9.3).

10682 The reduplicated form in pattern II is in most cases a complete reduplication.
 10683 Not only the onset, but also the vowel as well as the final consonant are copied,
 10684 even in the case of initial clusters, as in |*zjay*| → *zjayanzjay* ‘bulging, swollen’.

10685 Nevertheless, we do observe some phonetic attrition in the case of the codas
 10686 -*t*, -*y* and -*β*. Final -*t* is generally deleted regardless of the following consonant,
 10687 as in |*xsy̥t*| → *xsy̥xsy̥t* ‘long, thin and flexible’. An exception, which involves an
 10688 ideophone without initial cluster, is *cotcot* ‘small and cute’.

Final β generally disappears in the reduplicated syllable when the onset of the ideophonic root contains a labial (§4.2.3.1), as in |*bvβ*| → *bvbvβ* ‘stubborn, bulky’. This rule is however only optional, and *bvβbvβ* is also attested.

Final γ is generally deleted when the onset contains a velar (§4.2.3.1) as in |*gγγ*| → *grygry* ‘moving with difficulty, unstable on its feet’. This rule is also optional.

Another type of phonetic reduction optionally appears with a few ideophones with open rhymes in *-i* and a initial cluster with medial *-l-* or *-r-*. The medial is deleted and the rhyme is replaced by *-u*, following the regular process of partial reduplication common in verbal morphology (§4.1). Examples of this phenomenon include for instance |*gri*| → *guugri* ‘fat, soft and wet’ and |*qli*| → *quqli* ‘staring without moving’.

- (4) *u-βri nura kú-wy-rtoꝝ q^he nui-ycilaj zo q^he, nykinuu,*
 3SG.POSS-body DEM:PL IPFV-INV-look LNK SENS-be.wet EMPH LNK FILLER
ujuugri zo nui-pa.
- IDHP:II:fat.soft.wet EMPH SENS-AUX
- ‘The body (of the gecko) looks wet, it is wet and soft.’ (28-tshAwAre, 39)

10.1.2.3 Pattern III

Pattern III comprises the reduplicated ideophonic root with the additive *ny* (§8.2.6) inserted in between. It depicts a rhythmic action or a constant motion as in (5), depending on the semantics of the root.

- (5) *mbro u-tas to-ce tce zjaynyrzjan jy-ari-ndzi*
 horse 3SG-on IFR:UP-go LNK IDPH(III):tall AOR-go[II]-DU
 ‘He mounted the horse, and they went there, very tall.’ (elicited)

Deideophonic verbs in *yγ-* and *sy-* (§20.9.1) and *nui-* (§20.9.2) are built from pattern III ideophones, without additive *ny*.

Pattern III also allows a variant *RR-ny-RR* with double reduplication of the ideophonic root, with an intensive meaning. For instance *pyylipylnypyyl* ‘(walking) with big strides’ has the slightly different meaning ‘(running) with big strides’ with double reduplication (6).

- (6) *‘wo a-mu ma-pui-tui-zyy-sat tce azo*
 INTERJ 1SG.POSS-mother NEG-IMP-2-REFL-kill LNK 1SG
pui-nui-yi-a ny’ to-ti. pyylipylnypyylpyyl
 IPFV:DOWN-VERT-come-1SG be:FACT IFR-say IDPH(III):with.big.strides

10717 *pjy-nuu-yi.*

IFR:DOWN-AUTO-come

10718 ‘She said “Mother, don’t commit suicide, I am coming back” and came
10719 back running in big strides.’ (2003 kAndZWsqhaj2, 26-27)

10.1.2.4 Pattern IV

10721 Pattern IV is formed by combining with the ideophonic root, the additive *ny*
10722 (§8.2.6) and a partial copy of the ideophonic root replacing the onset by *l*, a pat-
10723 tern reminiscent of some distributed action verbs (§19.4.2.1). It describes an action
10724 involving motion occurring in disorderly fashion with intermittent changes of
10725 state. In (7) the form *zjaynylay* can be used to depict a drunk person who stumbles
10726 from time to time while walking, so that he seems taller at one time and shorter
10727 at another time.

10728 (7) *zjaynylay* *nua-ŋke*
IDPH(IV):tall SENS-go

10729 ‘He is walking unsteadily, very tall.’ (elicited)

10730 Deideophonic verbs in *yr*- and *sr*- can be build from pattern IV ideophones
10731 (§20.9.1), without insertion of the additive.

10.1.2.5 Pattern V

10732 Pattern V, made of the ideophonic root prefixed with the element *p^hu-*, is similar
10733 to pattern I (§10.1.2.1) semantically, but it is more rarely used; it indicates a more
10734 sudden action and/or one carried out to a higher degree.

10736 (8) *p^huzjan* *zo* *tx-ndzur*
IDPH(V):tall EMPH AOR-stand

10737 ‘He stood up suddenly, and (appeared to be) very tall.’ (elicited)

10738 This pattern occurs in particular with onomatopoeic ideophones, such as |
10739 *q^hloŋ|* ‘splashing’ (9).

10740 (9) *nuu p^huiq^hloŋ* *zo* *pjy-yrryt*
DEM IDPH(V):splashing EMPH IFR-throw

10741 ‘He threw (the bag into the water), making a sudden splashing noise.’
10742 (150824 kelaosi-zh, 155)

10743 The most common pattern V ideophone is *p^huclar* from |*clar*| ‘suddenly’, which
10744 has the *yr*- and *sr*- denominial forms (§20.9.1) *yyp^huclar* ‘moving/working quickly,
10745 hardworking’ and *syp^huclar* ‘do X quickly (not lingering)’.

10746 **10.1.2.6 Pattern VI**

10747 Pattern VI, with the root prefixed by *mrl̥y-*, describes a state like pattern II, but
 10748 differs from it in that it expresses a higher degree. In addition, it can be used to
 10749 express the result of a change of state with the verb *aβzu* ‘become’ as in (10). It is
 10750 the rarest of all ideophonic patterns, not attested in the Japhug text corpus.

- 10751 (10) *a-ye mrl̥yjan zo tʰw-aβzu*
 10752 1SG.POSS-grandson IDPH(VI):tall EMPH AOR-become
 10752 ‘My grandson has become very tall.’ (elicited)

10753 **10.1.2.7 Pattern VII**

10754 In pattern VII, the coda of the root (C_f ; if no coda is present, a /w/ is inserted,
 10755 §10.1.2.8) is resyllabified as onset of a syllable with the vowel *w*, and then redu-
 10756 plicated with the vowel *i* following the pattern $C_fV.C_fwi.C_fi$. It expresses a pro-
 10757 gressive change of state, involving in some case slow motion as in (11).

- 10758 (11) *zjaŋumji zo jy-ari*
 10759 IDPH(VII):tall EMPH AOR-go[II]
 10759 ‘He went away slowly (taller than rest).’ (elicited)

10760 **10.1.2.8 Pattern VIII**

10761 Pattern VIII depicts a state involving a lot of referents having the property de-
 10762 scribed by the ideophone, but spread out spatially in a disorderly fashion.

10763 The formula $Ruu.C_i a C_f i$ in Table 10.1 applies to ideophonic roots which do not
 10764 have /a/ as their main vowel, for instance |zjyŋ| (whose meaning is almost iden-
 10765 tical to that of |zjaŋ|) has the form *zjyŋ.w.zjay.i*. When the main vowel is /a/,
 10766 the formula is $C_i uu C_f u . C_i a C_f i$, thus the pattern VIII of |zjaŋ| is *zju.ŋuu.zja.ŋi*. This
 10767 form means that in a group of unique entities, some are tall and some are short,
 10768 but they are unevenly spread (12).

- 10769 (12) *zjuŋuzjanji puu-xcat*
 10770 IDPH(VIII):tall SENS-be.many
 10770 ‘There are many (people), some taller and some shorter.’ (elicited)

10771 Tshendzin glossed the meaning of (12) as follows (13).

- 10772 (13) *tsuku kuu-mbro tsuku kuu-mbryr kuu-fse*
 10772 some SBJ:PCP-be.tall some SBJ:PCP-be.short SBJ:PCP-be.like
 10773 ‘Some tall and some short.’ (elicited)

10774 In cases where the ideophonic root has no coda, the consonant /w/ replaces
 10775 *C_f* in patterns VII and VIII. For instance, /sx̥i/ ‘with big holes, with big nostrils’
 10776 has the pattern VIII form *sx̥uwuwsx̥awi* ‘full of holes everywhere’ (14).

- 10777 (14) *nunua ur-ŋguu ri c-tu-ndze tce ku-ryzi*
 DEM 3SG.POSS-in LOC TRAL-IPFV-eat[III] LNK IPFV-stay
 10778 *juw-cti tce, (...) nunutcu aþyndundst sx̥uwuwsx̥awi*
 SENS-be.AFF:FACT LNK DEM:LOC everywhere IDPH(VIII):with.holes
 10779 *juw-suw-spos tce*
 IPFV-CAUS-have.a.hole LNK
 10780 ‘(The species of ants *cym i qro*) goes into wood and eats it, and stays in
 10781 there, (...) and makes holes everywhere in it.’ (26-qro, 94-96)

10.1.2.9 Pattern IX

10782 Pattern IX is formally similar to pattern III except that /i/ is added after each
 10783 reduplicant of the ideophonic root. Semantically, it indicates that the entity pre-
 10784 senting the property described by the ideophonic root undergoes a fast motion.

- 10785 (15) *mbro ta-numbrypuu tce zjaninxjani zo jy-cq^{blyt}*
 horse AOR:3→3'-ride LNK IDPH(IX):tall EMPH AOR-disappear
 10786 ‘He mounted the horse and disappeared quickly (in the horizon), very
 10787 tall.’ (elicited)

10.1.2.10 Pattern X

10788 Pattern X involves reduplication of the ideophonic root three or more times (it
 10789 was not considered to be an ideophonic pattern in Jacques 2013c). It is the only
 10790 domain of Japhug grammar where triplication is allowed,³ unlike the Mazur va-
 10791 riety of Stau, where triplication occurs in finite verb forms (Gates 2017).

10792 Pattern X differs from all preceding patterns in that it is semantically restricted
 10793 to onomatopoeia (16) and endopathic ideophones (ie. ideophones expressing in-
 10794 inner sensations such as cold or pain) (17), and nearly always select *ti* ‘say’ as light
 10795 verb (§10.1.7.2). Lexical verbs are also attested with pattern X ideophones (18),
 10796 though more rarely.

³Another language in which ideophone triplication has been documented is Chintang (Rai et al. 2006).

10 Expressive words and sentence final particles

- 10799 (16) *tu-mbri nura cutcutcut zo tu-ti nur-ju*
 IPFV-call DEM:PL IDPH(X):cry EMPH IPFV-say SENS-be
 10800 ‘When it calls it makes ‘cut cut cut’: (24-ZmbrWpGa, 8)
- 10801 (17) *nui-kui-syŋo tce, nui nui-łob tce, zwurzurzur*
 IPFV-GENR:S/O-listen LNK DEM AOR-come.out LNK IDPH(X):itchy.feeling
 10802 *tu-ti q^he tcendyre tx-ndyr nui-łob cti.*
 IPFV-say LNK LNK pimple IPFV-come.out be:AFF:FACT
 10803 ‘When it appears, one has an itchy feeling, and a pimple appears.’
 10804 (25-khArWm, 4)

10805 The triplication (reduplication at will) of the root expresses either repeated
 10806 action like pattern III, or a continuous and unceasing state. Some pattern X ideo-
 10807 phones are reduplicated four (18) or more (19) times.

- 10808 (18) *t_{yci} qaj nui t_{yty} u-ŋgu rcuβrcuβrcuβrcuβ zo*
 barley wheat DEM cupboard 3SG.POSS-in IDPH(X):rustling EMPH
 10809 *pju-l_y nui, u-zgra nui p_{jy}-sy-mts^hym.*
 IPFV-release DEM 3SG.POSS-noise DEM IFR.IPFV-pro-hear
 10810 ‘(In the night), one could hear the rustling noise of the (one-legged
 10811 demon)_i pouring barley and wheat grains into the cupboard (of the
 10812 woman with whom he_i was having a relationship). (140510 rkoNJAl,
 10813 32-33)

10814 Not all onomatopoeia are realistic descriptions of natural sounds. In (19) we
 10815 find an ideophonic root |*ze*|* describing the supposed minute sound made by the
 10816 quick motion of the legs of a millipede.

- 10817 (19) *kú-wy-rtob tui-mŋas kui u-m_{ylyja}b ra m_{új}-saχsyl*
 IPFV-INV-look GENR.POSS-eye ERG 3SG.POSS-limb PL NEG:SENS-be.clear
 10818 *zo ri, “zezezezezeze” zo tu-ti ju-ce q^he,*
 EMPH LNK IDPH(II):sound EMPH IPFV-say IPFV-go LNK
 10819 *u-tu-mbjom syre zo*
 3SG.POSS-NMLZ:DEG-be.quick be.ridiculous:FACT EMPH
 10820 ‘(Of a type of small millipede) Looking at it, its feet are not clearly visible,
 10821 but it moves making zezezezezeze, extremely quickly.’ (28-kWpAz, 155)

10822 Some of the roots used in pattern X are polysyllabic (see for instance *dudut* in
 10823 §10.2.3), in which case the ideophone can only be reduplicated two times.

10.1.3 Semantic categories

10824 Japhug ideophones are used for describing various features including sound, colour, shape, texture, attitude or mood, and some ideophones are multimodal, referring to combination of several types of sensory information.

10825 Dingemanse (2012: 663) proposed the hierarchy (20) according to which, if a particular language possesses ideophones belonging to a particular class in this hierarchy, it will also present ideophones for all the lower classes. All categories 10831 are exemplified in Japhug.

- 10832 (20) SOUND > MOTION > VISUAL PATTERNS > OTHER SENSORY PERCEPTIONS >
10833 INNER FEELINGS AND COGNITIVE STATES

10834 Onomatopoeic ideophones include for instance |*qʰlonj*| ‘splashing’ (9, §10.1.2.5)
10835 or |*tɸʰuyj*| ‘metal clinking’.

10836 In addition to sounds, ideophonic roots also describe shapes (for instance *boŋboŋ*
10837 ‘ovoid’), specific hues of colour (*smuysmuys* ‘fresh green’), touch (*bruuybruuy* ‘rough,
10838 covered in small pimples’), temperature (*xuβxuβ* ‘warm’), size (*scraxscrax* ‘very
10839 small, close to the ground’), quantity (*zuiβzuiβ* ‘many (people, object) standing/
10840 in upright position’), attitudes (*dyyrdyyr* ‘agape, in a daze, looking stupid’, *cqucqu*
10841 ‘frowning’), pain (*çnuj* ‘intense and sudden pain’), body postion (*çpʰyβçpʰyβ* ‘lying
10842 on the ground, motionless’) and also cognitive states (*lytlyt* ‘free from worry’).

10843 Ideophonic roots often combine several parameters. For instance, *çyaŋçyaŋ*
10844 ‘sharp and shiny (of fangs)’ encodes both shape and hue.

10845 It appears that there are no ideophonic *roots* specifically dedicated to expressing
10846 motion; however, dynamic ideophonic patterns (I, III, IV, IX) applied to ideophones
10847 describing sound or shapes often add a motional imagery. For instance,
10848 the root |*xur*| means ‘round’ in pattern II, but ‘rotating, turning’ in pattern III
10849 (69, §20.9.2) and IX (21).

- 10850 (21) *wi-myljabs kura ny kura tu-ste qʰe tce,*
10851 3SG.POSS-limb DEM.PROX:PL ADD DEM.PROX:PL IPFV-do.like[III] LNK LNK
icqʰa staxpurjyskʰi yuu wi-jwab nuu
10852 the.aforementioned plant.name GEN 3SG.POSS-leave DEM
xurinrxuri zo tu-su-mtcur.
10853 IDPH(IX):round EMPH IPFV-CAUS-turn
(There is a species of insect which) does this with its legs repeatedly, and
10854 rotates the leaves of the *staxpurjyskʰi* very quickly.’ (18-NGolo, 139)

Some ideophones, however, can have an auditory interpretation competing with many other ones. Thus, |*bvβ*| in pattern II form *bvbvβ* can designate many objects clustered together (like mushrooms) (92, §18.4.2.1 and 19, §9.1.2), a stubborn person or a heavy and cumbersome object depending on the context.

With a dynamic pattern such as I or III, it can be interpreted as designating the noise made by a heavy object falling from a high place as in (22), a meaning shared with the deideophonic verbs *sxbvβ* and *nubvβ* (see the examples in 70, §20.9.2).

- (22) *mbro kuu [...] tc^he me nuu bvβ zo*
 horse ERG girl DEM IDPH(I):heavy.object.falling EMPH
pjx-βde q^he
 IFR:DOWN-throw LNK
 ‘The horse (...) and threw the girl down, making ‘bom’ (on the ground).’
 (2003 kAndZWsqhaj, 48)

10.1.4 Irregularities

In practice, very few ideophonic roots allow the application of all the ten patterns exemplified in §10.1.2. In many cases, a particular pattern is not attested because there is no imaginable context where the situation could exist.

The meaning of some ideophonic roots can be incompatible with stative patterns (II, VI and VIII). For instance, the very common |*clab*| ‘suddenly’ is only attested in patterns I, III and V.

Even in the case of ideophonic roots which allow several different patterns, the semantics of a particular pattern cannot always be predicted from that of the other ones. In other words, not all ideophonic roots have a basic meaning from which the semantics of all patterns can be regularly derived. In this section, we provide two examples with such unpredictable semantics.

First, the root |*ruβ*| has a pattern III *ruβnyruβ* meaning ‘dripping (drop by drop) continuously’ (23).

- (23) *li mbaly-puu nuu yuu uu-qom ra zo pjx-łob cti q^he*
 again bull-DIM DEM GEN 3SG.POSS-tear PL
ruβnyruβ IDPH(III):dripping.continuously EMPH IFR-come.out be.AFF:FACT LNK
 ‘The tears of the calf flowed, dripping without stop.’ (140512 fushang he yaomo-zh, 136)

10885 The regular *yr-* deideophonic verb (§20.9.1) *yrruubruuβ* ‘drip continuously’ de-
 10886 riving from *ruβnrruβ* is also attested (example 62, §21.3.2.3). In addition, the com-
 10887 pound noun *mciruubruuβ* ‘person whose saliva drips continuously’ (§5.5.3) has the
 10888 same form with compatible semantics.

10889 However, the pattern VIII *ruuwurawi* from the same root has an entirely differ-
 10890 ent meaning ‘upset and confused’. It occurs in collocation with *tu-sum* ‘mind’
 10891 (24) and cannot be combined with nouns referring to liquids. Although it could
 10892 originally have been a metaphorical extension of the concrete meaning of this
 10893 root, the exact pathway of semantic change is by no means obvious.

- 10894 (24) *w-ky-nuzduuy* *jnu-dyn* *tce, u-sum*
 3SG.POSS-OBJ:PCP-be.worried.about SENS-be.many LNK 3SG.POSS-mind
 10895 *ruuwurawi* *jnu-xtsu*
 IDPH(VIII):confused IPFV-ferment
 10896 ‘He is worried about many things, and he feels upset and confused.’
 10897 (elicited)

10898 Second, the root |*dzoy|* has a pattern II *dzoydzoy* meaning ‘having bristling
 10899 hair’ (25).

- 10900 (25) *tceri nuunu w-rme* *nwu dzoydzoy* *jnu-pa*
 LNK DEM 3SG.POSS-hair DEM IDPH(II):bristling.hair SENS-AUX
 10901 ‘The hair (on the squirrel’s tail) is bristling.’ (28-qapar, 135)

10902 However, the pattern III form *dzognydzoy* has an entirely different meaning: it
 10903 refers to the itchy feeling one experiences when blood flows into a limb that has
 10904 fallen asleep (due to a sitting position for instance) and blood flows back into the
 10905 numb limb, as in (26).

- 10906 (26) *tu-ŋke-a* *tce a-mi* *dzognydzoy* *zo jnu-ti*
 IPFV:UP-walk-1SG LNK 1SG.POSS-foot IDPH(III):feel.itchy EMPH SENS-say
 10907 *ma cʰy-ndzurput*
 because IFR-be.numb
 10908 ‘My foot feels itchy as I walk, because it was numb.’ (elicited)

10909 These two examples are in no way exceptional; while ideophonic morphology
 10910 is productive, one should not assume that semantics is predictable.

10.1.5 The phonology of ideophonic roots

The phonological markedness of Japhug ideophones is relatively easy to assess, as ideophonic roots (and all the forms derived from them) present uncommon features from in both onsets and codas.

10.1.5.1 Onsets

Of all 422 known onsets in Japhug, 63 (including 45 two-consonant and 18 three-consonant clusters) are exclusively attested in ideophones or ideophonic verbs. These onsets present four types of unusual combinations which are completely absent from the native vocabulary and/or Tibetan borrowings.

First, palatal stops can be combined with the medials /r/, /l/ in clusters such as /cr-/, /c^hr-/, /jr-/, /cl-/, /ɲl-/ (§4.2.2.3, §4.2.2.4) in ideophones. The only medial consonant compatible with palatal stops in the non-ideophonic lexicon is /ɣ/ (§4.2.2.5).

Second, dental stops are found with the medials /r/, /j/ and /w/ in clusters such as /dr-/, /dj-/, /dw-/ and /t^hj-/ in ideophones. In the non-ideophonic lexicon, the only attested medial after dental stops is /ɣ/ (§4.2.2.5).⁴ There is evidence that proto-Gyalrong *tr- became a retroflex affricate /tʂ-/ (§5.4.3.2, §7.1.3), and that clusters of this type have been removed by regular sound change (§4.2.2.4).

Third, the unvoiced fricatives /ʂ/ and /χ/ occur as preinitial consonants in clusters with voiced main consonant such as /ʂy-/, /ʂn-/ and /χn-/ (*χnuaχni* ‘soft and thin (of food); dizzy, listless’). In the non-ideophonic vocabulary, [ʂ] and [χ] as first element of clusters are in complementary distribution with their voiced counterparts [r] and [w], respectively (§4.2.1.4, §4.2.1.8).

Fourth, /l/ is common as first element of clusters in ideophonic roots, as in *lbjulbjuy* ‘soft, hanging down’. Comparison with other Rgyalrongic languages reveals that *l- preinitial has changed to /j-/ in the non-ideophonic vocabulary (§4.2.1.6).

Another conspicuous phonological feature in ideophones is the very high relative frequency of non-prenasalized voiced stops. In native (non-Tibetan and non-deideophonic) nouns and verbs, the simple stop onsets /b/ and /g/ are extremely rare (§3.2.1). The onsets /d/ and /ʒ/ are more common in the non-ideophonic vocabulary, but almost all originate from clusters containing laterals (see Jacques 2004: 313–314).

⁴The noun *qumdrop* ‘crane’ also has such a cluster, but an onomatopoeic origin of the second syllable is not impossible, compare the Tibetan name of the same bird ཀྲྲྲ ཁྲྲྲ ཁྲྲྲ ‘crane’.

10944 While Japhug ideophones, unlike calling/chasing sounds (§10.2.2) do not con-
 10945 tain independent phonemes that are not found in the non-ideophonic vocabu-
 10946 lary, they enrich the complexity of the phonological system by filling gaps in the
 10947 phonological system caused by sound changes (see for instance Diffloth 1979)
 10948 and by favouring rare phonemes and phoneme combinations.

10949 10.1.5.2 Codas

10950 The phonological specificities of ideophonic roots are not limited to onsets: the
 10951 rhymes presents also some unusual features, especially the codas.

10952 The Kamnyu dialect of Japhug lacks a labial stop coda in the non-ideophonic
 10953 vocabulary (§3.2.2), due to a sound change $*-p \rightarrow /-\beta/$. However, some ideo-
 10954 phones allow a stop final /-p/ instead of /-β/; there is considerable variation
 10955 across speakers as to which ideophones allow this pronunciation. Tshendzin op-
 10956 tionally uses final /-p/ with six ideophones in combination with the main vowel
 10957 /ɯ/: *tsʰuptsʰup* ‘feeling of humidity in the air’, *teʰuptçʰup* ‘with water drops’,
 10958 *zupzup* ‘many objects/persons standing upright’, *cʰupcʰup* ‘filthy’, *rsuprsup* ‘very
 10959 hairy’ and *rkʰuprkʰup* ‘knocking noise’.

10960 Another remarkable property of ideophones is the frequency of the codas /-ŋ/,
 10961 /-l/ and /-n/ (§3.2.2). These codas have been eliminated by a series of sound chan-
 10962 ges, merging with the vowels in complex ways (for instance, proto-Rgyalrongic
 10963 $*-an$ became Japhug /-o/, §3.3.3). They are also found in loanwords from Tibetan,
 10964 but some rhymes such as /-unŋ/ are only attested in ideophones.

10965 10.1.5.3 Phonological gradation and iconicity

10966 This section focuses on *relative iconicity* (Dingemanse 2011a: 47), namely the
 10967 correlation between a more or less gradient phonological feature and a semantic
 10968 dimension, a phenomenon also known as sound symbolism (Boas & Deloria 1941:
 10969 16) or synesthesia (Gerner 2004: 186–187).

10970 Japhug lacks regular patterns of consonant gradation such as the well-identified
 10971 alternations described in Lakhota (Boas & Deloria 1941: 16–18). Gradation in place
 10972 of articulation is attested, but specific to a particular family of ideophones. For
 10973 instance, the roots in Table 10.2 have a dental – retroflex – velar – uvular grada-
 10974 tion which does correlate with the degree of whiteness, but the same gradation
 10975 is not generalizable to all ideophones with coronal fricatives.

10976 In addition to consonant gradation, even more puzzling phenomenon is *ideo-*
 10977 *phonic hybridization*, namely the merger between several ideophonic families by
 10978 combining rhymes and initial consonant clusters. The ‘clear, bright, white’ family

Table 10.2: Example of consonant gradation in Japhug ideophones

Root	Meaning	Example
suŋ	white	hair of old people
zuŋ	white	hair of old people
suŋ	clear	the sky, a glance
xuŋ	clear	the sky, a room
χaŋ	slightly orange	the sky during daybreak

10979 (unvoiced coronal initial fricative, -u/aŋ rhyme) of Table 10.2 has intersections
 10980 with two other ideophonic families shown in Tables 10.3 and 10.4.

Table 10.3: The [dental fricative/ affricate+j+velar coda] ideophonic family ‘high’

Root	Meaning	Example
sjuŋ	white and high	a stupa
tsjaŋ	higher than the rest	man
zjaŋ	higher than the rest	man
zjɔŋ	higher than the rest	man

10981 Table 10.3 presents the ideophonic family of |zjaŋ| ‘tall’, the ideophone used
 10982 as example in §10.1.2. The members of this family mean ‘high, lofty’, and have
 10983 the shape a dental fricative initial, followed by a j+ medial and a velar coda. The
 10984 root |sjuŋ| combines these phonological features with the unvoiced fricative /s/
 10985 and the rhyme -uŋ of the family ‘white’ in Table 10.2. Its meaning also combines
 10986 ‘white’ and ‘high’ from both families.

10987 The ideophonic family meaning ‘round, spherical’ (Table 10.4) is particularly
 10988 rich. Its intersection with the ‘white’ family comprises four ideophones (|sluŋ|,
 10989 |slay|, |clay| and |clay|), which share the initial consonant, the vowel and the
 10990 coda with the ideophones in Table 10.2, and integrate both the meanings ‘white,
 10991 bright, shiny’ and ‘round’.

10992 The two ideophonic families presented in Tables 10.3 and 10.4. have intersec-
 10993 tions with yet other families; a comprehensive account of ideophones however
 10994 goes beyond the scope of this grammar, as a considerable amount of elicitation
 10995 will be necessary to fully reveal the structure of ideophonic vocabulary. Rather

Table 10.4: The [(fricative/r)+l+(u/a/o)+dorsal coda] ideophonic family
'round'

Root	Meaning	Example
<i>slun̩j</i>	bright and round	the sun
<i>slay̩j</i>	white and round	the moon
<i>clay̩j</i>	bright, shiny, spherical	a shaved head
<i>clay̩j</i>	bright, shiny, spherical	a shaved head
<i>rlay̩j</i>	average size, spherical	the moon
<i>rlyŋ̩j</i>	huge, bulky, vaguely spherical	a yak
<i>rlaz̩j</i>	round and hard	tsampa in bowl
<i>rlob̩j</i>	average size, spherical	the head of a small child
<i>rwoʂ̩j</i>	little, in great number spherical	peas
<i>rjob̩j</i>	cylindrical and with a smooth surface	
<i>xplob̩j</i>	small, spherical	mushroom, hat

than isolated lexemes, ideophonic roots are organized in a network of similar forms, with gradual phonetic resemblances associated with gradual shades of meanings. A historical scenario accounting for how this type of pattern may have come into being is presented in §10.1.6.

10.1.5.4 Emphasis

Pattern II ideophones (§10.1.2.2) have in some cases an emphatic pronunciation, in which the first member of the reduplicated ideophone receives a peak in F0 and intensity. In (§27) for instance, the first syllable of the ideophone *xtʂɔŋ̩j*- has the highest pitch (315 Hz) in the whole sentence, and there is a sharp pitch drop on the second syllable (267 Hz), as shown in Figure 10.1. There is possibly a difference in voice quality (Jacques 2013c), though this remains to be demonstrated.

- (27) *xcelwi rcanu, tu-se nuu ku-ts^{hi} ny ku-ts^{hi}, (...) tick UNEXP:FOC GENR.POSS-blood DEM IPFV-drink ADD IPFV-drink (...)*
wi-xtu nuu xtsóŋ̩.xtʂɔŋ̩ zo nuu-pa nuu-ŋu.
3SG.POSS-belly DEM IDPH(II):bloated EMPH IPFV-AUX SENS-be

'The tick drink one's blood again and again, (...) so that its belly become bloated.' (25-xCelwi, 44)

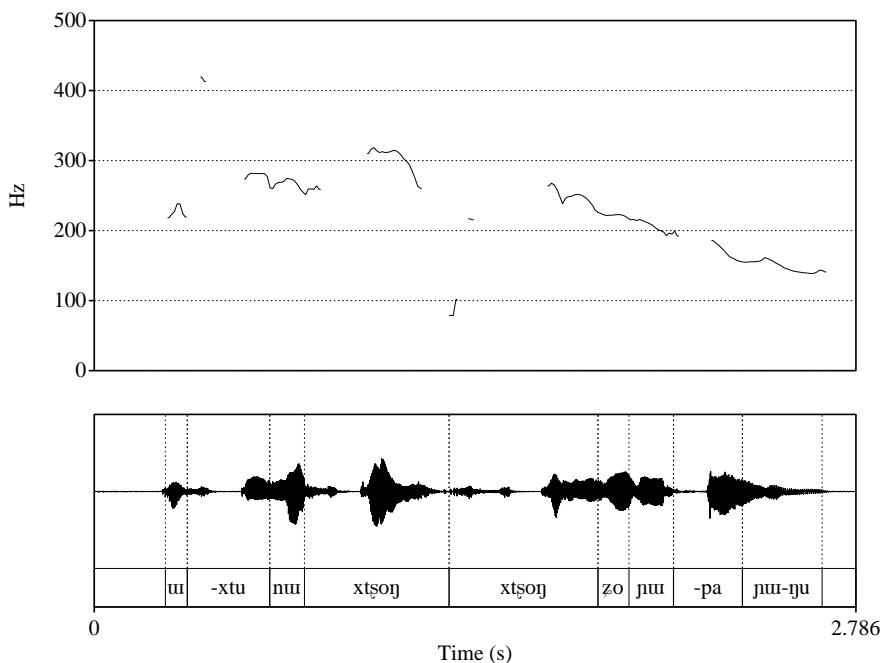


Figure 10.1: Pitch peak in (§27)

11011 This emphatic pronunciation is not uncommon, but in most cases the ideo-
 11012 phones do not have any special intonation. Example (§28) illustrates the same
 11013 ideophone *xtʂoŋxtʂoŋ* a few sentence later in the same text, without any empha-
 11014 sis.

- 11015 (28) *tce ma nuŋu tu-fka xtʂoŋxtʂoŋ zo ju.*
 LNK LNK DEM IPFV-be.full IDPH(II):bloated EMPH be:FULL
 11016 ‘(The tick) is full (from having drunk blood) and bloated.’ (25-xCelwi, 59)

10.1.6 The genesis of ideophones

11018 While it cannot be *a priori* excluded that some ideophones could be ancient, their
 11019 phonological markedness is a sign that they are constantly renewed, using pro-
 11020 cesses different from those found in non-ideophonic words. In this section, I pro-
 11021 pose a scenario account for one of the origins of ideophonic roots, and ideophonic
 11022 hybridization (§10.1.5.3).

Some ideophonic roots are obvious built from Tibetan loanwords, but with slight phonetic changes. The most obvious case is |ldzurŋ| ‘skyblue’, which originates from the first syllable of རྩྱ བྱ ར ཉ *ldzayŋ.kʰu* ‘green’ (also borrowed as the unpossible noun *ldzayk'u* ‘blue/green’, §5.2.2) with a slight modification of the vowel. The semantic relationship between the ideophone and the Tibetan borrowing is not always as obvious. For instance, |zjaj| and |zjraj|, both meaning ‘filled up, looking soft’ (of a person’s belly, a bag filled with objects) are reminiscent of the verb *βrjanj* ‘stretch tight’ (of skin), which is borrowed from the past tense of རྩྱ བྱ ཉ *rg'ony.brg'anj* ‘stretch, distend’: the ideophones describe a skin or membrane that is overstretched and distended, like the result of the action expressed by the verb *βrjanj*. The form |zjaj| could either have been independently borrowed from a Tibetan variety where *r*- and *s*- merge, or directly based on *βrjanj* with further consonant modification. The root |zjraj| is derived from |zjaj| by insertion of *-r* (see below for a possible account of these sporadic sound changes).

The Tibetan origin of some ideophones is one possible reason for the frequency of voiced stops in ideophones (§10.1.5.1), as /b/, /d/, /ɟ/ and /g/ are common in clusters in the borrowed layer.

However, in many case the lexical origin of ideophones has been completely blurred by a variety of mechanisms which can only be hypothesized. The four synonymous ideophones *dzoŋ* (29), *zgoŋ*, *goŋ* and *dzur* (30) exclusively occur in collocation with the transitive verb *tsʰoŋ* ‘attach’ and the noun *tu-χpum* ‘knee’ (§22.4.2.8) to express both the speed of the kneeling motion and the highly deferential attitude of the kneeling person.

- (29) *wi-χpum dzoŋ zo pjy-tsʰoŋ*
 3SG.POSS-knee IDPH(I):kneeling EMPH IFR-attach
 ‘(The demon) immediately knelt down.’ (140513 abide he mogui-zh, 47)

- (30) *wi-χpum dzur zo ta-nu-tsʰoŋ ndyre,*
 3SG.POSS-knee IDPH(I):kneeling EMPH AOR:3'→3-AUTO-attach LNK
ty-lu pa-nu-tcyst nu-yu
 INDEF.POSS-milk AOR:3'→3-AUTO-take.out SENS-be
 ‘She immediately knelt down and milked (the cow).’ (2003 Kunbzang, 106)

In addition to pattern I, they also occur in pattern III as in (31).

- (31) *ty-pytso ra duuxpa-nu matei tcendyre, zgoŋnyzgoŋ zo*
 INDEF.POSS-child PL poor-PL because LNK IDPH(II):kneeling EMPH

- 11053 *nur-χpum* *ta-ts^hoB-nur* *tce*
 3PL.POSS-knee AOR:3' → 3-attach-PL LNK
 11054 ‘The poor children, they knelt (before the ogre) one after the other.’
 11055 (160704 poucet4-v2, 42)

11056 I propose that one of the mechanism of ideophone creation is by playful re-
 11057 analysis from lexical verb roots. The four ideophones *dzoB*, *zgoB*, *goB* and *dzur*,
 11058 which have either the onset (z)g- or dz- and the rhymes -oB and -ur, originate in
 11059 my opinion from the verbs *ndzoB* ‘be attached’ (the anticausative of *ts^hoB* ‘attach’,
 11060 §18.5.3) and *azgur* ‘bow, bend down’ (the latter borrowed from རྒྱର ສୁର ‘bend
 11061 down’). The development of these ideophones occurred in three steps, as illus-
 11062 trated in Figure 10.2.

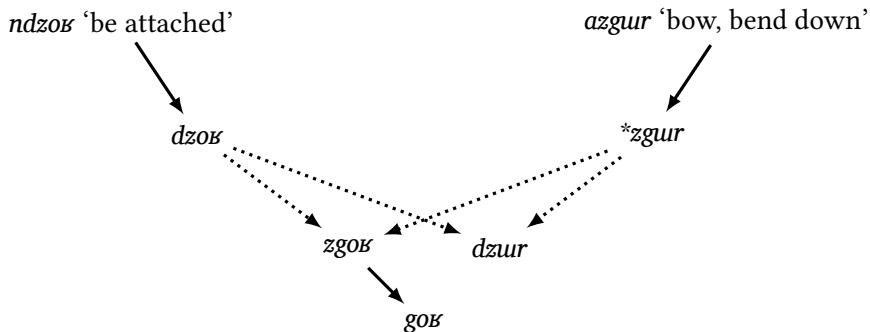


Figure 10.2: Development of the family of ideophones meaning ‘kneeling respectfully’

11063 First, the ideophone roots *dzoB* ‘kneeling’ (with alternation to the more marked
 11064 plain voiced *dz-* onset, §3.2.1) and an unattested **zgur* (perhaps ‘kneeling and
 11065 bowing’) were directly created from the two verbs. The forms *zgoB* and *dzur* re-
 11066 sult from blending from the two primary ideophones *dzoB* and **zgur* by exchang-
 11067 ing rhyme and onset. Third, *goB* was derived from *zgoB* by simplification of the
 11068 onset.

11069 This process is not a derivation in the proper sense, since it is neither regular
 11070 nor predictable, and involves processes such as blending which do not normally
 11071 occur in the verbal and nominal morphology of the Japhug language.

11072 In addition to native roots and Tibetan loanwords, an obvious source of ideo-
 11073 phones are onomatopoeic imitations of natural sounds. However, given the fact
 11074 that ideophonic changes do not follow regular rules unlike the normal vocab-
 11075 ularly on the one hand, and that northern Gyalrong languages lack historical

records on the other hand, it is unlikely that the prehistory of this type of ideophones can be recovered.

10.1.7 Syntax of ideophones

As pointed out by Dingemanse (2012: 660), the markedness of ideophones is not limited to their phonology, but is also manifested in their syntactic behaviour.

Ideophones nearly always occur as verb adjuncts in Japhug. They are most commonly found with the intransitive light verb *pa*, the quotative verb *ti* ‘say’ and the similitative verb *stu* ‘do like’, following a cross-linguistically well-attested pattern (Güldemann 2008: 280–288). They can also be used as adjunct of any lexical verb in either nominalized or finite form, and in a handful of examples, as noun modifiers. Ideophones commonly occur with the emphatic *zo* (§26.1.1.5), which follows them.

10.1.7.1 The auxiliary *pa*

The intransitive verb *pa* (also attested in collocation with numerals, §22.4.1.4) is one of the most common light verb used with ideophones. It is the labile intransitive counterpart (§14.5.1.4) of the verb *pa* ‘do’, which also occurs as a light verb in noun-verb collocations (§22.4.2.5).

It can either appear as an inflected form as in (32), or as the participle *kua-pa* as in (33) (see also 3, §10.1.2.2). It is mainly used with pattern II ideophones describing colour, shape or spatial disposition.

- 11096 (32) *ui-phoŋbu nuu rcanuu ɛŋʃlɪŋʃli zo puu-pa.*
 3SG.POSS-body DEM UNEXP:FOC IDPH(II):huge EMPH SENS-AUX
 11097 ‘Its body, it is enormous.’ (20-sWNgi, 16)

- 11098 (33) *az̩o gruβgruβ ui-ftsa nuu t̩-kua-qawyr ma*
 1SG matsutake 3SG.POSS-nephew DEM AOR-SBJ:PCP-open.cap apart.from
 11099 *nuu ma χploεχplos kua-pa*
 DEM apart.from IDPH(II):small.and.spherical SBJ:PCP-AUX
 11100 *muu-puu-mto-t-a*
 NEG-AOR-see-PST:TR-1SG
 11101 ‘The (mushroom called) the ‘matsutake’s nephew’, I have seen ones with
 11102 opened caps, but never seen one in ball shape (before the cap opens).’
 11103 (23-grWBgrWBftsa, 5)

Like other stative verbs, *pa* has an inchoative meaning in the Imperfective (§21.2.6), the Aorist (§21.5.1.3) and the Inferential (§21.5.2.4). It is attested with the UPWARDS (*tu-pa*, example 34) and the WESTWARDS (*nua-pa*, example §27 in §10.1.5.4) orientation preverbs.

- (34) *uu-ru nura nua-rom tce r̥b̥yβr̥b̥yβ tu-pa nua-ŋu*
 3SG.POSS-stalk DEM:PL AOR-dry LNK IDPH(II):rough IPFV-AUX SENS-be
 ‘Once it has dried, its stalk becomes very rough.’ (14-sWNgWJu, 22)

While *pa* is mainly found with pattern II ideophones, it is not restricted to these, and attested in a handful of examples with other patterns, such as III (35) and IV (36).

- (35) *zuruzzyri qʰe li t̥r-se nur to-mbat qʰe, li*
 progressively LNK again INDEF.POSS-blood DEM IFR-diminish LNK again
t̥rmbyo nua duurnyduur pjy-pa
 drum DEM IDPH(III):drumming.far.away IFR.IPFV-AUX
 ‘Progressively, the blood (in the lake) started to recede, and there was again a drumming sound far away.’ (2003-kWBRA, 106)
- (36) *ckyrynylyr zo kui-pa nua jo-nua-yi*
 IDPH(IV):limping EMPH SBJ:PCP-AUX DEM IFR-VERT-come
 ‘He came back home limping.’ (140429 jiedi-zh, 141)

10.1.7.2 Quotative *ti* ‘say’

The verb *ti* ‘say’ occurs as a light verb with ideophones expressing sound (37, 38) and endopathic sensations (especially itching or pain as in 39), in patterns I (37, 39), III (38) and X (§10.1.2.10).

- (37) *uu-tʰoŋ t̥cu zjuy zo ti nua-ŋu*
 3SG.POSS-ground LOC IDPH(II):heavy.object.falling EMPH say:FACT SENS-be
 ‘(The stone) made a loud noise (as it fell) on the ground.’ (The 2003 tWxtsa, 76)
- (38) *cʰuu-tut c̥iŋgu tce tce tú-wy-ndza tce, t̥c̥wuznxtc̥wuz*
 IPFV-be.ripe before LNK LNK IPFV-INV-eat LNK IDPH(III):crunchy.sound
tu-ti nua-ŋu tʰuu-tut uu-qʰu tce tce t̥y-wy-ndza
 IPFV-say SENS-be:FACT AOR-be.ripe 3SG.POSS-after LNK AOR-INV-eat

- 11128 *tce, zwabnyzwab* *tu-ti* *nur-ŋu tce, nur nur-mum.*
 LNK IDPH(III):not.crunchy IPFV-say SENS-be LNK DEM SENS-be.tasty
 11129 'If one eats (an apple)_i before it_i is ripe, it makes a crunchy sound, when it
 11130 is ripe, it makes a soft (not crunchy) sound, it is (more) tasty (in this case
 11131 because it has become sweeter and less sour).' (07-paXCi, 27-28)
- 11132 (39) *tu-kui-ti* *kuny cŋuy* *zo tu-ti* *tu-mŋym*
 IPFV-GENR:S/O-say also IDPH(I):intense.pain EMPH IPFV-say IPFV-hurt
 11133 *ŋu*
 be:FACT
 11134 '(When suffering from this disease), one feels intense pain even when one
 11135 talks.' (29-RzAr, 35)

10.1.7.3 The similitative verb *stu* 'do like'

11137 The transitive similitative verb *stu* 'do like' (§14.4.2, §25.4.1.2) most commonly ap-
 11138 pears with the non-stative ideophonic patterns III (40) and IV (41). It expresses
 11139 volitional actions, unlike *pa* and *ti*. The syntactic function of the ideophones when
 11140 used with *stu* 'do like' is possibly that of semi-object, as they replace the demon-
 11141 stratives that usually occur with this verb (§14.4.2).

- 11142 (40) *w-sŋuro* *lu-lxt* *tce tuiynrɬuy,*
 3SG.POSS-breath IPFV-release LNK IDPH(III):breathing.movement
 11143 *ɬuyñrluy* *tu-ste* *nur-ŋu.*
 IDPH(III):breathing.movement IPFV-do.like[III] SENS-be
 11144 'When (the frog)_i breathes, it_i expands and retracts (its whole body) with
 11145 each breath.' (27-qacPa, 3)

11146 The ideophone can describe the action as a whole (40), or an aspect of the
 11147 action on the object of *stu* as in (41), where the root |rlɔʂ| depicts the shape of the
 11148 fly's head (Table 10.4, §10.1.5.3), and pattern III morphology (§10.1.2.3) the motion
 11149 of the head.

- 11150 (41) *w-jab* *tu-tsuum* *tce, w-ku* *ra pjw-nur-χtci*
 3SG.POSS-hand IPFV:UP-take.away LNK 3SG.POSS-head PL IPFV-AUTO-wash
 11151 *tce w-ku* *ra rlɔʂnryrlɔʂ* *tu-ste* *nur-ŋu*
 LNK 3SG.POSS-head PL IDPH(III):round IPFV-do.like[III] SENS-be
 11152 '(The fly) stretches up its forelegs to clean its head (and the area around
 11153 it), making (at the same time) a rhythmic rolling motion (with its head,
 11154 round and minute).' (25-akWzgumba, 51)

11155 The reflexive form *zγȳ-stu* (§18.3.3) is almost exclusively attested with ideo-
 11156 phones, in particular in the manner serial verb construction (§25.4.1) with other
 11157 intransitive verbs, such as *ku-ryzi* in (42). With pattern II ideophones, it means
 11158 ‘make/have a X look’, generally expressing an attitude made on purpose.

- 11159 (42) *spyi pui-nui-te ndxre, nyki rfxlpu tu-ce*
 attic 3SG-inside IPFV:EAST-AUTO-put[III] LNK king IPFV:UP-go
 11160 *rcanui, tu-ryjoxbzur ku-fse rcanui, nyki,*
 UNEXP:FOC IPFV-clean.up INF:STAT-be.like UNEXP:FOC FILLER
 11161 *χts^hχts^hyt zo tu-zγȳ-stu tce, ku-ryzi pui-ŋu,*
 IDPH(II):lively.small EMPH IPFV-REFL-do.like LNK IPFV-stay PST.IPFV-be
 11162 *βdaŋmu tu-ce rcanui, p^hxtc^hwxtyr zo pjui-te tce,*
 lady IPFV:UP-go UNEXP:FOC mess EMPH IPFV-put[III] LNK
 11163 *quqlu zo tu-zγȳ-stu tce ku-ryzi pui-ŋu*
 IDPH(II):hangdog.look EMPH IPFV-REFL-do.like LNK IPFV-stay PST.IPFV-be
 11164 *pui-ŋu.*
 SENS-be
 11165 ‘(The king)_i put (the bird)_j in the attic. When the king_i would go up there,
 11166 it_j would clean everything up and would be lively; when the queen
 11167 would go up there, it_j would make a mess and have a hangdog look.’
 11168 (2003 Kunbzang, 302-4)

11169 It is also compatible with pattern I (43) or III ideophones, expressing motion
 11170 and/or sound.

- 11171 (43) *tce nuu ku-xtcu~xtci zo nū-wy-mbi tce ma*
 LNK DEM SBJ:PCP-EMPH~be.small EMPH IPFV-INV-give LNK LNK
 11172 *cŋyβ zo tu-zγȳ-stu tce ju-nui-mje tce*
 IDPH(I):snapping EMPH IPFV-REFL-do.like LNK IPFV-AUTO-take[III] LNK
 11173 *tu-ndze nui-ŋu.*
 IPFV-eat[III] SENS-be
 11174 ‘We would give (our turtle)_i a little piece_j (of meat), and it_i would grab it_j,
 11175 with a snapping noise and eat it_j.’ (140510 wugui, 23)

11176 10.1.7.4 Other verbs

11177 Ideophones are not restricted in use to the light verbs cited above, and can appear
 11178 with other types of verbs with compatible semantics. There are strict collocation

restrictions, and most ideophones can only be used with one or a handful of verbs.

With the three light verbs discussed above (§10.1.7.1, §10.1.7.2, §10.1.7.3), ideophones are strictly preverbal, but when employed with other verbs, postverbal order is common, in particular in the case of stative adjectival verbs (44).

- (44) *wu-mjaŋ wuma nuu yuu wu-rkuu nura juu-yurni, 3SG.POSS-eye really DEM GEN 3SG.POSS-side DEM:PL SENS-be.red juu-yurni tsyaetstyab zo SENS-be.red IDPH(II):brilliant.red EMPH*
 ‘The sides of its eye proper are red, brilliant red.’ (23-qapGAmtWmtW, 50-51)

Ideophones can be postverbal even in participial and finite relative clauses (§23.3.6), and can be located closer to the verb than determiners such as the indefinite *ci* (§9.1.4.1), as in (45).

- (45) *[kuu-yurni zo tsyaetstyab] ci ηu tce SBJ:PCP-be.red EMPH IDPH(II):brilliant.red INDEF be:FACT LNK*
 ‘It (a type of millipede) is brilliant red.’ (28-kWpAz, 152)

When their semantic scope is more focalized on one of the arguments, the ideophone can directly follow a noun as in (46) or (47).

- (46) *tui-ŋga wu-taŋ ra wu-mat bvbvb zo ku-ndzob. EMPH IPFV-ACaus:attach*
 ‘When one walks among (these plants), their fruits attach to one’s clothes in clumps.’ (18-qromJoR, 170)

- (47) *rtc^buuŋjuu yuu wu-rme nuu kuu juu-kuu-z-ryza. caterpillar GEN 3SG.POSS-hair DEM ERG IPFV-GENR:S/O-CAUS-itch DEM tui-ca a-my-nuu-xtuy ra ma t̪yndyr GENR.POSS-flesh IRR-NEG-PFV-touch be.needed:FACT LNK pimple bruybruy zo tu-tcxt juu-ŋu IDPH(II):little.pimples EMPH IPFV-take.out SENS-be*
 ‘The caterpillar’s hair itches people, it should not touch one’s flesh, otherwise it will cause a lot of little pimples to appear.’ (25-rtchWRjW, 86-88)

11205 **10.1.7.5 Noun modifier**

11206 In examples such as (46) or (47) (§10.1.7.4), the syntactic status of the ideophone
 11207 is ambiguous between a sentential adverb and a postnominal modifier.

11208 Examples (48) and (49) are incontrovertible evidence that ideophones can serve
 11209 as noun modifier: in (48) is embedded within an exceptive (§8.2.8) postpositional
 11210 phrase which does not contain any verb, and must be analyzed as modifier of the
 11211 counted noun *tu-rdoꝝ* ‘one piece’.

- 11212 (48) *ma nuunu cawurambum tu-ti-nuu tce nuunu, nykinuu,*
 LNK DEM Shwa.ba.rwa.mbum IPFV-say-PL LNK DEM FILLER
 11213 *[[tu-rdoꝝ zo zjyjzjy]] ma kui-me*
 one-piece EMPH IDPH(II):short.and.thick apart.from SBJ:PCP-not.exist
 11214 *pui-ŋu kʰi*
 SENS-be HEARSAY

11215 ‘People call it ‘Shwaba rwa’bum’, it is (a kind of deer antler) with only
 11216 one (branch), short and thick.’ (27-qartshaz, 72-3)

11217 In (49), the ideophone *ndzv̥rndzv̥r* is in the emphatic exceptive construction,
 11218 with the linker *ma* (§8.2.8).

- 11219 (49) *<donglang> uizo-sti nuunu, [t̪-tcu] tuu-rdoꝝ ndzv̥rndzv̥r]*
 ANTHR 3SG-alone DEM INDEF.POSS-son one-piece IDPH(II):alone
 11220 *ma nuu ma kui-tu p̥jy-me.*
 LNK DEM apart.from SBJ:PCP-exist IFR.IPFV-not.exist
 11221 ‘There remained only Donglang, the boy, all alone (on earth after his
 11222 family had been taken away).’ (150828 donglang, 134)

11223 However, ideophones as postnominal modifiers are rare, and only occur in
 11224 combination with a singular counted noun such as *tu-rdoꝝ* in the meaning ‘alone’.

11225 **10.1.8 Discourse function**

11226 Ideophones are non-essential to communication in the sense that any sentence
 11227 containing an ideophone can be glossed with another sentence of identical truth
 11228 value without using any ideophone. The frequency of ideophones and ideophonic
 11229 verbs presents considerable variation in the corpus: some stories and procedural
 11230 texts are almost devoid of them, while some episodes of traditional narratives
 11231 are densely packed with them.

11232 Ideophones convey rich and intricate meanings in a succinct way. In tradi-
 11233 tional stories, their use contributes to the vividness of the description. For in-
 11234 stance, in (50), the choice of the pattern II *ndyrndyr* ‘huge and imposing’ and the
 11235 pattern III *pcyrmnjcyrt* ‘loud and moving around’ evokes a much more expressive
 11236 picture than the translation provided here in plain language. Native speakers,
 11237 upon hearing such a sentence, visualize the vivid picture of huge lush trees and
 11238 flocks of birds flying around, tweeting and chirping.

- 11239 (50) *nura tx-stu-t-a tce, sun̥gwnax̥t̥cum ndyrndyr zo*
 11240 DEM:PL AOR-do.like-PST:TR-1SG LNK deep.forest IDPH(II):huge EMPH
nur-stu-t-a, w̥-taš, pya pcyrmnjcyrt zo nu-mbri tce
 11241 AOR-do.like-PST:TR-1SG 3SG-on birds IDPH(III):loud EMPH SENS-call LNK
 11242 ‘I acted this way, I created a huge and deep forest on the top of whose
 11243 trees birds are tweeting and chirping and flying around.’
 (2011-04-smanmi, 220-221)

11244 10.2 Other expressive words

11245 Two classes of words present common properties with, but are different from, real
 11246 ideophones: interjections (§10.2.1) and calling sounds (§10.2.2). Although both
 11247 also present phonological markedness and some degree of iconicity, they are not
 11248 subject to ideophonic morphology (§10.1.1) and do not share the same syntactic
 11249 properties.

11250 In addition, we find some nouns which, unlike deideophonic verbs (§20.9.1),
 11251 ideophonic counted nouns (§7.3.4.4) and nominal ideophonic compounds (§5.5.3),
 11252 are directly built on an expressive root without derivational morphology (§10.2.3).

11253 10.2.1 Interjections

11254 Interjections are marked words expressing a feeling or an emotion like ideo-
 11255 phones, but differ from them in that they cannot serve as verb adjuncts, cannot
 11256 receive ideophonic morphology and are mainly used in isolation, either in their
 11257 own clause or as the reported speech complements of verbs of speaking like *ti*
 11258 ‘say’ (51, 52).

- 11259 (51) *tx-yndzo tce ‘utc^hutc^hwi’ ma-tu-ti, tx-sycke tce*
 11260 AOR-be.cold LNK INTERJ:cold NEG:IMP-2-say AOR-PROP-burn LNK
(nykinui) ‘atsatsa’ ma-tu-ti, kui-mnjym tx-tu tce
 FILLER INTERJ:pain NEG:IMP-2-say SBJ:PCP-hurt AOR-exist LNK

11261 ‘atsatsa’ ma-tuu-ti ra
 INTERJ:pain NEG:IMP-2-say be.needed:FACT
 11262 ‘When you feel cold, don’t say “Ah”, when you feel hot, don’t say “ouch”,
 11263 when you feel pain, don’t say “ouch”. (07-deluge, 66-68)

11264 (52) srutp^hu sruunmuu kuu-fse kuu-sy-ymuu~ymu zo
 râkshasa râkshasî SBJ:PCP-be.like SBJ:PCP-PROP-EMPH~fear EMPH
 11265 ny-k-xtury-ndzi-ci ri, ‘wudzuidzi’ mui-to-ti.
 IFR-PEG-meet-DU-PEG LNK INTERJ:fear NEG-IFR-say
 11266 ‘They met fearsome râkshasas and râkshasis, but he did not say ‘how
 11267 frightful!’. (31-deluge, 116)

11268 Interjections can however be followed by full clauses, but with a pause as in
 11269 (53) (see also for instance *ja* in example 33, §24.2.5.1).

11270 (53) aci! nyu-tuu-yyngi.
 INTERJ:correction SENS-2-be.right
 11271 ‘Of course (I take back what I have said)! You are right.’ (2003 tWxtsa, 44)

11272 The marker *wo* can precede without pause a noun in vocative function (54)
 11273 (see also 6, §10.1.2.3).

11274 (54) wo a-mu a-kum yuu-tx-ci
 INTERJ 1SG.POSS-mother 1SG.POSS-door CISL-IMP-open[III]
 11275 ‘Mother, come and open the door for me!’ (2012 tWJo, 23)

11276 Some interjections cannot form a complete utterance on their own: *χawo* ‘if
 11277 only’ introduces a clause in the Irrealis expressing a wish (see examples 120,
 11278 §21.4.1.4 and 40, §5.1.2.10). The form *tsatsatsa* is used in a correlative construction
 11279 meaning ‘one can say that *X*, but one can also say that $\neg X$, with the positive *X*
 11280 and negative $\neg X$ forms of the same verb followed by the additive *ny*, as in (55).

11281 (55) nyu-tuu-fse ny tsatsatsa, müj-tuu-fse ny tsatsatsa
 SENS-2-be.like ADD INTERJ NEG:SENS-2-be.like ADD INTERJ
 11282 ‘One can say that you look like her, but one can also say that you don’t.’
 11283 (2014-kWLAG, 476)

11284 Interjections can be classified into four categories (Table 10.5): involuntary re-
 11285 sponses to stimuli (interjections in the proper sense, Dingemanse 2011b), and
 11286 uninflected words expressing comments on words uttered by oneself or others,
 11287 short orders or polite expressions.

Table 10.5: List of interjections

Category	Form	Function
Involuntary response	<i>witç^hutç^huu, wutç^hutç^huu</i>	expresses cold
	<i>atsatsa</i>	expresses pain
	<i>atsatsa</i>	expresses pain
	<i>wudzudzi</i>	expresses fear
	<i>ama, amaj</i>	expresses surprise
	<i>mts^hyri</i>	expresses surprise
Comment	<i>açi</i>	taking back what one has just said
	<i>χawo X</i>	‘If only X’
	<i>Xtsatsatsa</i> \neg <i>Xtsatsatsa</i>	‘One can say that X, but one can also say that \neg X’
	<i>maχtçui</i>	‘I told you so!’
	<i>çarja</i>	‘It serves you right!’
	<i>woja</i>	confirmation
Orders	<i>c^he, prjk^hje</i>	‘wait!’
	<i>kuž</i>	‘go!’
	<i>ja</i>	‘come on’
		speech filler (§10.3)
Phatic	<i>k^hχβzaj</i>	‘here I am’
	<i>k^hatšu</i>	‘thanks’
	<i>wortç^hi (wojyr)</i>	‘please’
	<i>ya</i>	‘yes’
	<i>wowe</i>	response to words meaning ‘goodbye’
	<i>woja</i>	confirmation

Among these forms, *prjk^hje* ‘wait!’ is the only one with a clear internal etymology (from *prjk^hu je*, §22.2.1). Some interjections are from Tibetan, including the polite expressions and *mts^hyri* ‘how strange’ (§21.3.2.4), which is originally a uninflected predicate borrowed from མཚར: *mts^har* ‘feel strange’.

Although interjections lack morphological alternation, the additive *ny* can be inserted within *wortç^hi wojyr* (which is borrowed from བୋର୍ତ୍ତେ: *fior.tç^he* ‘thanks’) to express repeated action as in (56) (see also 57, §22.2.1), a use reminiscent of the Ideophonic patterns III (§10.1.2.3) and IV (§10.1.2.4)

- 11296 (56) *t̪y-t̪eu* *nua kua* “*wortči ny wojyr zo*” *to-ti* *pua-ŋu*
 INDEF.POSS-boy DEM ERG please ADD please EMPH IFR-say SENS-be
 11297 ‘The boy said ‘please’ (several times).’ (qachGa 2012, 81)

11298 The phatic expressions and *syrma* ‘good night’ and *kvnvβdi* ‘take care’, though
 11299 originally non-inflecting, can take number indexation suffixes (§14.7.1) and have
 11300 become quasi-verbs, though they are highly anomalous and defective. The inter-
 11301 jection *wo/we* can be used as a response to these expressions.

11302 The expression *kʰyβzaj* ‘here I am’ is uttered by the guest when he arrives at
 11303 someone else’s home; the hosts invites the guest inside by saying *ny-tsu* ‘your
 11304 way’.

11305 The interjection *woja* ‘yes, right’ occurs to confirm the validity of a previous
 11306 statement, sometimes assertive as in (57) but also with interrogative markers
 11307 such as *ye* (see 76, §10.4.2). It can be used whether the addressee had a vocal
 11308 reaction or not.

- 11309 (57) *ununuu tcendi <wazi> nua u-mdob* *wuma zo* *pua-ŋsu-ndo*.
 11310 DEM west socks DEM 3SG.POSS-colour really EMPH SENS-PROG-take
 11311 *woja, unuu kua-fse* *pua-ŋu*.
 11312 INTERJ DEM SBJ:PCP-be.like SENS-be
 ‘It has the colour of the socks over there. Yes, it is like that.’
 (23-grWBgrWBftsa, 48)

11313 10.2.2 Calling and chasing sounds

11314 Calling and chasing sounds, also referred to as ‘summons’ and ‘dispersals’ (Ai-
 11315 khenvald 2010: 318–319) are sounds used by people to interact with animals.⁵
 11316 They are used either to incite the animals to come forward in the direction of the
 11317 speaker (calling sounds, as in 58a) or to advance or go away (chasing sounds, as
 11318 in 58b).

- 11319 (58) a. *luulu púa-wy-nua-ŋkʰyzŋga qʰe tcítci tcítci tcítci nura*
 11320 cat IPFV-INV-APPL-shout LNK CALL:cat DEM:PL
tu-kua-ti qʰe ju-yi ŋu
 11321 IPFV-GENR-say LNK IPFV-come be:FACT
 ‘When one calls a cat, one says *tcítci tcítci tcítci* and it comes.’
 11322 (06-huchements1, 34-33)

⁵French has the more colorful term *huchement de berger* to designate this class of utterances.

- 11323 b. *lalu jú-wy-no tce “tç^ha” tu-kur-ti ñu*
 cat IPFV-INV-chase LNK CHASE:cat IPFV-GENR-say be:FACT
 11324 ‘When one chases a cat, one says *tç^ha*.’ (06-huchements2, 14)

11325 In Japhug, nearly all domestic animals, whether mammals or birds, have spe-
 11326 cial dedicated calling sounds, a list of which is provided in Table 10.6. In addition,
 11327 a click sound for which no IPA symbol exists is used to call puppies.

Table 10.6: Calling and chasing sounds in Japhug

	animal	order
<i>tç^ha</i>	<i>lulu</i> ‘cat’	chasing
<i>tçítçi tçítçi tçítçi</i>		calling
<i>wule</i>	<i>muja</i> ‘cow’	chasing
<i>aþleþle</i>		calling
<i>buwo</i>	<i>mbala</i> ‘bull’	chasing
<i>abobo</i>		calling
<i>tsa? tsa?, tsotsa</i>	<i>k^huna</i> ‘dog’	calling
<i>soŋ</i>		chasing
<i>tsutṣutṣutṣutṣutṣu</i>	<i>kumpya</i> ‘fowl’	calling
<i>kçuit</i>		chasing
<i>χaj</i>	<i>mbro</i> ‘horse’	chasing
<i>aa aa aa</i>		calling
<i>zbozbozbozbo</i>	<i>ftsoꝝ</i> ‘female hybrid yak’	calling
<i>ac^hoc^ho</i>	<i>jla</i> ‘male hybrid yak’	calling
<i>tç^hyt</i>	<i>paꝝ</i> ‘pig’	chasing
<i>anininini, ?wan, ?wan ?wan</i>	pig (adult)	calling
<i>anininini </i>	pig (little)	calling
<i>alolo</i>	<i>qazo</i> ‘sheep’	calling
<i>titititi</i>	<i>ts^hyt</i> ‘goat’	calling
<i>k^huçu</i>	goat, sheep	chasing

11328 Given the rudimentary nature of man-animal interactions, it is not surprising
 11329 that these sounds cannot be subjected to any morphological operation other than
 11330 reduplication. They cannot be used with any light verbs or occur as adjuncts.

10 Expressive words and sentence final particles

11331 However, if the animal has a name, it can be added after the calling/chasing
 11332 sound (59).

11333 (59) *tce uzo kui-yskui a-puu-ŋu qʰe*
 LNK 3SG SBJ:PCP-having.white.colour.on.the.back IRR-IPFV-be LNK
 11334 “*aβleβle rguskui*” *tu-kur-ti qʰe tce uzo tso*
 CALLING:cow cow.name IPFV-GENR-say LNK LNK 3SG understand:FACT
 11335 *cti qʰe ju-nuu-yi cti*
 be.AFF:FACT LNK IPFV-AUTO-come be.AFF:FACT
 11336 ‘If (the cow) has white colour on the back (and given the name *rguskui*),
 11337 one says *aβleβle rguskui* and she understands, and comes by herself.’
 11338 (06-huchements1, 3)

11339 Phonologically, these words contain very unusual sounds: they make use of
 11340 consonants and vowel that are not found at all in the standard lexicon: the dental
 11341 click /ʃ/, the glottal stop in a cluster /?w/ or as a coda and breathy voice.

11342 Only one of these words appears to have an identifiable etymology: *soŋ* ‘cha-
 11343 sing sound for dogs’ is possibly related to Tibetan བྱྱ བྱྱ ‘go’. However, there is a
 11344 striking resemblance between some of the chasing/calling sounds in Japhug and
 11345 Khroskyabs (Lai 2017: 227), as illustrated by Table 10.7. It is unlikely that these
 11346 resemblances are due to common inheritance.

Table 10.7: Calling/chasing sounds in Japhug and Khroskyabs

Japhug	Meaning	Khroskyabs	Meaning
<i>aβleβle</i>	calling a cow	<i>vlêvleyle</i>	calling a hybrid yak
<i>tsa? tsa?</i>	calling a dog	<i>tsâ</i>	calling a dog
<i>soŋ</i>	chasing a dog	<i>sôŋ</i>	chasing a dog
<i>tsutṣutṣutṣutṣutṣu</i>	calling a fowl	<i>tsû:tsutṣu</i>	calling a fowl

10.2.3 Deonomatopoeic expressive nouns

11347 A certain number of bird names are based on onomatopoeia imitating their song.
 11348 For instance, *qusput* ‘cuckoo’ (example 55, §22.2.1) and *tsuibot* ‘pheasant’ (60) are
 11349 described as making a sound identical to their Japhug name.
 11350

- 11351 (60) *tsuibot p^hu nuu tu-mbri tce, “tsuibot tsuibot tsuibot” ntsu*
 pheasant male DEM IPFV-make.sound LNK IDPH(X):cry always
 11352 *tu-ti ηu.*
 IPFV-say be:FACT
 11353 ‘When the male pheasant sings, it says *tsuibot tsuibot tsuibot*.’ (24-kWmu,
 11354 110)

11355 In the case of *dudut* ‘turtle dove’, its calling sound is described as being slightly
 11356 different from its name, with various interpretations (61).⁶

- 11357 (61) *tce dudut ky-ti ci tu tce, tce “dudut dudut” ntsu*
 LNK turtle.dove OBJ:PCP-say INDEF exist LNK LNK onomatopoeia always
 11358 *tu-ti. tsuku kuu “dudut cuŋgluy” tu-ti ηu ra*
 IPFV-say some ERG onomatopoeia mortar IPFV-say be:FACT pl
 11359 *tu-ti-nuu ri, nuu mꝫ-xsi ri, “dudu wu” ku-fse*
 IPFV-say-PL LNK DEM NEG-GENR:know LNK onomatopoeia SBJ:PCP-be.like
 11360 *tu-ti ηgryl.*
 IPFV-say be.usually.the.case:FACT
 11361 ‘There is (a bird) called turtle-dove, it always makes *dudut dudut*. Some
 11362 people say that it makes *dudut cuŋgluy*, I don’t know (if it is true), (in any
 11363 case) it makes *dudu wu*.’ (22-CAGpGa, 26-28)

11364 The bird name *tacoxcor* is based on the onomatopoeia describing its song (see
 11365 example 134, §21.4.2.2), but with the addition of a *ta-* prefix, which may or may
 11366 not be related to the action nominal *tuu-* prefix (§16.4).

10.3 Speech fillers

11368 In Japhug speech fillers, rather than a central vowel, are used to mark pause
 11369 during speech either due to hesitation, or to give the speaker more time to reflect
 11370 on what he or she is about to say.

11371 The cataphoric demonstrative *n̥ki*, used both as a pronoun (§6.9.2.2) and as a
 11372 noun modifier (§9.1.2), is the most frequent speech filler (examples in this gram-
 11373 mar include 24 in §12.4.3, 63 in §9.1.3.4 and 121 in §15.1.5.5). It can be combined
 11374 with the determiner *nuu* (§9.1.5.4) as *n̥kinuu* (6, §15.1.1.2) or with the indefinite *ci*
 11375 (§9.1.4.1) as *n̥ki ci nuu*.

⁶In Tshobdun, ‘pheasant’ and ‘turtle-dove’ are called *tsəbot* and *dudut*, respectively (Sun & Blogros 2019: 137). These words cannot be inherited from the common ancestor of Japhug and Tshobdun however, since Tshobdun -ot should correspond to either -yt or -ut.

11376 The aforementioned anaphoric topic marker *içqʰa* (§9.1.5.2), which derives from
 11377 the adverb *içqʰa* ‘just now’, also occurs as speech filler (example 217, §15.2.8.2),
 11378 likewise frequently followed by the determiner *nui* (25, §15.1.2.2 and 205, §15.2.7).

- 11379 (62) *nunuu tce, pei ku-ryzi cti tce, nyki nui, içqʰa nui,*
 DEM LNK outside IPFV-stay be.AFF:FACT LNK FILLER DEM FILLER DEM
 11380 *kʰa uu-ŋgur ju-yi my-ŋgryl*
 house 3SG.POSS-in IPFV-come NEG-be.usually.the.case:FACT
 11381 ‘That one (the wild cat), it stays outside, it does not come inside houses
 11382 (unlike the domestic cat).’ (21-IWLU, 6-7)

11383 The interjection *ja* (§10.2.1) is used as speech filler by persons listening to tra-
 11384 ditional stories, as a sign that they are following the narrative of the storyteller.
 11385 Traditional storytellers require their audience to respond in this way, as shown
 11386 by (63).

- 11387 (63) “*ja*” *tr-ti ma tce müj-kʰui.*
 FILLER IMP-say LNK LNK NEG:SENS-be.possible
 11388 ‘Say ‘ya’, otherwise (I) can’t (tell the story).’ (160720 kandZislama, 003)

10.4 Sentence final particles

11390 Japhug has a rich system of sentence final particles, which combine with verbal
 11391 morphology to express modality, evidentiality, interrogation and the attitude of
 11392 the speaker.

11393 Given the fact that the meaning of most sentence final particles is rather diffi-
 11394 cult to pinpoint with precision, the non-specific gloss SFP is used for all of them.

10.4.1 Particles used in commands

11396 The particle *je* conveys a milder tone to orders expressed with Imperative (§21.4.2),
 11397 Irrealis (§21.4.1) and Prohibitive (§21.4.3), as shown by (64) (see also 131 in §21.4.2.2
 11398 and §21.4.2.3 in §135).

- 11399 (64) *pskʰije tce <guan> ma-ky-tui-βze je!*
 wait LNK turn.off NEG-IMP-2-make[III] SFP
 11400 ‘Wait, don’t hang up (your phone).’ (conversation, 2015-07-05)

11401 It combines with first person Imperfective verb forms to express hortative
 11402 meaning (§21.2.5) as in (65).

- 11403 (65) *azo c^htu-yi-a je ma m^y-p^han-a ny*
 1SG IPFV:DOWNSTREAM-come-1SG SFP LNK NEG:be.efficient:FACT-1SG ADD

11404 *m^y-bdwiy-a t^hay ny*
 NEG-harm:FACT-1SG SFP SFP

11405 ‘Let me come along, even if I am of no use, I will not do any harm.’

11406 (several occurrences)

11407 It is also used with 2→1 Imperfective forms to express commands with a first
11408 person object as in (66), since Imperative lacks 2→1 forms (§21.4.2).

- 11409 (66) *a-wi* *tc^horzi u-ŋgw* *pjuw-kw-rku-a* *je*
 1SG.POSS-grandmother jar 3SG.POSS-in IPFV:DOWN-2→1-put.in-1SG SFP
 11410 'Grandmother, put me in the jar, and...' (2005 Kunbzang, 346)

¹¹⁴¹¹ In addition, the particle *je* is often added to phatic expressions such as *tr-ystu*
¹¹⁴¹² ‘goodbye’, *srrma* ‘good night’ and *krynyðdi* ‘take care’ (§14.7.1) as in (67).

- 11413 (67) *kxnxβdi je a-mu!*
 take.care SFP 1SG.POSS-mother
 11414 ‘Take care, mother!’ (Gesar,54)

Other postverbal elements used with Modal categories include the noun *smullbm* ‘prayer’ which occurs with the Irrealis (§21.8.3.2) and the softened command particle *wo* (originally an interjection) as in (68). This particle can be cliticized to the verb stem (§11.6.2).

- 11419 (68) *k^hu nui ɻo nui-βde wo, a-me nui χtanx*
 tiger DEM ADVERS IMP-throw SFP 1SG.POSS-daughter DEM COMP
 11420 *a-ftsab uifry-yi ma*
 1SG.POSS-roof.leak RH.Q-come SFP
 11421 ‘My daughter, don’t worry about the tiger, (I am more worried) that my
 11422 (house) could have a roof leak.’ (khu 2005, 5)

The *je* and *wo* particles are curiously similar to the Imperative and Hortative suffixes -(*j*)*e* and -(*w*)*e* in the Kiranti language Khaling (Jacques et al. 2012: 1114–1123), though it is extremely unlikely that this could reflect common inheritance, and is rather a pure coincidence.⁷

⁷In any case, Proto-Rgyalrong *-o yields Japhug -u (§3.3.3).

10.4.2 Particles used in polar questions

In addition to the interrogative prefix *wu-* (§21.7.4), and interrogative pronouns (§6.5), questions can be marked by a series of several interrogative particles.

The particle *ci* is the most common way of expressing a polar question, in combination with a verb in assertive form as in (69) and (70). In this function, it is equivalent to the prefix *wu-* (§21.7.4).

- (69) *kuki li pjuu-mnat-a ci?*

DEM.PROX again IPFV-repeat-1SG QU

‘Do I tell (the story) again?’ (150908 menglang-zh, 1)

- (70) *ny-zwifj nuu-yi ci?*

2SG.POSS-sleep SENS-come QU ?

‘Are you feeling sleepy?’ (09-stoR, 65)

It can be used to express an alternative between two possibilities (71), often

with an assertive verb form followed by the corresponding negative one (72).

- (71) *nuuzora smi c^huu-tuu-nuu-βluu-nuu nyu ci, <dian>*

2PL fire IPFV-2-AUTO-burn-PL be:FACT QU electricity

c^huu-tuu-numbjuum-nuu nyu?

IPFV-2-get.warm-PL be:FACT

‘Do you burn a fire, or do you get warm with (an) electric (radiator)?’

(conversation, 2013-12-13)

- (72) *kuki a-χpi ki nuu-mpcyr ci*

DEM.PROX 1SG.POSS-story DEM.PROX SENS-be.beautiful QU

múuj-mpcyr?

NEG:SENS-be.beautiful

‘Is this story of mine beautiful or not?’ (140512 fushang he yaomo-zh, 190)

Furthermore, *ci* can indicate a disjunction between more than two options. In this function, it is repeated after each clause in the disjunction, except the last one, as in (73) (see also 141, §25.6.4).

- (73) *χsyr k^hri ui-ta_β tuu-γ<nuu>mdzuu ci, rŋu_l k^hri ui-ta_β*

gold seat 3SG.POSS-on 2-<AUTO>sit:FACT QU silver seat 3SG.POSS-on

tuu-γ<nuu>mdzuu ci, (...) com k^hri ui-ta_β tuu-γ<nuu>mdzuu ci,

2-<AUTO>sit:FACT QU iron seat 3SG.POSS-on 2-<AUTO>sit:FACT QU

- 11451 *si k^hri u-tab tui-γ<nu>mdzu?*
 wood seat 3SG.POSS-on 2-<AUTO>sit:FACT
 11452 ‘Will you sit on the golden seat, the silver seat, the iron seat or the
 11453 wooden seat?’ (2005 Kunbzang, 226-228)

11454 The apprehensive prefix *cu-* is likely to have been grammaticalized from this
 11455 particle (§21.7.1.3).

11456 The particle *kui* occurs in questions to oneself (74), rhetorical questions and
 11457 confirmation-seeking questions (79, §21.3.2.7). Unlike *ci*, it occurs together with
 11458 either an interrogative pronoun or in combination with an interrogative verb
 11459 form.⁸ It is particularly common with the Dubitative (§21.4.4).

- 11460 (74) *a-rcymbe-ŋga nuu ŋotcu nuu-a<nu>ri kui?*
 1SG.POSS-old.jacket-wear DEM where AOR:WEST-<AUTO>go[II] QU
 11461 ‘Where did my beggar (wearer of an old jacket) of a husband vanish?’
 11462 (2005 Kunbzang, 231)

11463 It can be combined with the particles *ma* (§10.4.4) and *ye* (see below) as *kuma*
 11464 (75) and *kuye*.

- 11465 (75) *m_yzui t_c^hi muu-puu-fc_yt-tci kuma?*
 even.more what NEG-AOR-tell-1DU QU
 11466 ‘Which (trees) are there which we have not yet told (a story) about?’
 11467 (13-tApWpjR, 65)

11468 Several particles mark a question inviting the addressee to confirm what the
 11469 speaker has said: *ye*, which even resembles an interjection in that it can be pre-
 11470 ceded by a pause as in (76), *nétci* (77, 78) and *loβtci* (79).

- 11471 (76) *ku_pdesqafsum-pa to-tsu, ye? woja, nuu to-tsu*
 43-year IFR-pass SFP INTERJ DEM IFR-pass
 11472 ‘(How many years have passed since 1969?), 43 years have passed, right?
 11473 Yes, that many years have passed.’ (12-BzaNsa, 15)

- 11474 (77) *hehe kui-l_yy acyβ, kui-sat-a nuu-ŋu n_etci?*
 INTERJ SBJ:PCP-herd ANTHR 2→1-kill:FACT-1SG SENS-be SFP
 11475 ‘Shepherd Askyabs, you are preparing to kill me, right?’ (2003 Kunbzang,
 11476 337)

⁸Example (74) could be translated into French using the marker *done* as ‘Mais où est donc passé mon mendiant (de mari)?’

- 11477 (78) “*tʂʰa mbuz* *nur-ŋu*” *to-ti-a* *ŋu* *nétci?*
 tea spill.overt:FACT SENS-be IFR-say-1SG be:FACT SFP
 11478 ‘I said ‘The tea is abouyt to spill over’, didn’t I?’ (26-tAGe, 15)

- 11479 (79) *nyzo ny-tcui* *tui-sla* *to-mtsʰyt loβtci?*
 2SG 2SG.POSS-son one-month IFR-full SFP
 11480 ‘Your son is now more than one month old, right? (conversation
 11481 2013-12-02)

11482 The particle *rabxmabx* also invites the addressee to give a positive answer to
 11483 the speaker’s suggestion like aforementioned markers, but with an additional
 11484 overtone ‘How about ...?’ (80).

- 11485 (80) *tui-rdo* *tsa* *ryzi-j* *tce tú-wy-qur-nuu* *rabxmabx*
 one-piece a.little stay:FACT-1PL LNK IPFV-INV-help-PL SFP
 11486 ‘How about only one of us staying (here) and helping them?’ (180503
 11487 xiyouji 12-zh, 78)

11488 It can be used to express supplication, as in (81) (see also the nearly identical
 11489 example 187, §8.3.3).

- 11490 (81) *a-rjfit* *a-nmabx* *zo* *nua* *tx-tui-stu-nuu*
 1SG.POSS-offspring 1SG.POSS-husband EMPH DEM AOR-2-do.like-PL
 11491 *cti* *tce, azo* *wi-tsʰyt* *tsa*
 be.AFF:FACT LNK 1SG 3SG.POSS-proper.measure a.little
 11492 *nua-kui-nyctṣabli-a-nuu* *rabxmabx ma*
 IPFV-2→1-torture-1SG-PL SFP SFP
 11493 ‘Rkangrang, you dealt with my son in the same way as you did with my
 11494 husband (have him killed), don’t go over the top in your torturing of me
 11495 (torture me with proper measure), please?’ (Norbzang 2012, 218-219)

11496 The second syllable *-mabx* in *rabxmabx* probably originates from the negative cop-
 11497 uula *mabx* ‘not be’ (§13.1.2, §22.5.1.1) as postverbal negation (§22.5.3; perhaps from
 11498 an interrogative form *ú-mabx* ‘is it not ...?’). The source of the first syllable *ra-* is
 11499 less clear, but may be from the auxiliary *ra* ‘be needed’ (§24.5.3.1), the original
 11500 meaning being ‘is it not the case that X have/has to ...’

11501 10.4.3 Hearsay particle

11502 The particle *kʰi* expresses hearsay, and often occurs when the original narrator
 11503 is left unidentified by the speaker (82).

- 11504 (82) *wi-jabmu ra to-tcxt k^hi; wo, tcendyre kui-yyrbab nu*
 3SG.POSS-thumb PL IFR-take.out SFP INTERJ LNK SBJ:PCP-hunt DEM
 11505 *kui ky-nuacymuydui muu-pjy-cha k^hi.*
 ERG INF-shoot NEG-IFR-can SFP
 11506 '(They say that the monkey mother) stuck out her thumb (as a sign
 11507 meaning 'now you can shoot'),⁹ but the hunter could not shoot.' (19-GzW,
 11508 75-76)

11509 Sentences marked with this particle (83a) can be reformulated using a reported
 11510 speech clause with the complement-taking noun *wi-fcxt* 'story' (§24.6.3.2), as in
 11511 (83b).

- 11512 (83) a. *izo ji-svtc^ha k^hu pjy-tu k^hi*
 1PL 1PL.POSS-place tiger IFR.IPFV-exist SFP
 11513 b. *izo ji-svtc^ha k^hu pjy-tu wi-fcxt tu.*
 1PL 1PL.POSS-place tiger IFR.IPFV-exist 3SG.POSS-story exist:FACT
 11514 'People say that there used to be tigers in our place.' (elicited)

11515 The particle *k^hi* can be treated as an afterthought, and undergo right-dislocation
 11516 (§22.1.3) together with an auxiliary verb as in (84), or with a full pause and the
 11517 beginning of a new sentence as in (85), when the speaker realizes as s/he is speak-
 11518 ing that s/he only knows this information from second-hand sources, as explicitly
 11519 stated in (85).

- 11520 (84) *kui-dyn tsa tuturca ku-ryzi-nuu puu-ju, puu-ju k^hi*
 SBJ:PCP-be.many a.little together IPFV-stay-PL SENS-be SENS-be SFP
 11521 'They stay together in great number (on remote cliffs), it is said'
 11522 (20-ldWG, 12)

- 11523 (85) *ki kui-fse kui-rymbuumbri zo kui-fse*
 DEM.PROX SBJ:PCP-be.like SBj:PCP-spread.in.patches EMPH SBJ:PCP-be.like
 11524 *tu-łob puu-ju. puu-ju k^hi ma, aj muu-puu-mto-t-a*
 IPFV-come.out SENS-be SENS-be SFP LNK 1SG NEG-AOR-see-PST:TR-1SG
 11525 '(The mushroom *Hericium erinaceus*) grows in patches (not spread
 11526 evenly). So they say, I have not seen it.' (23-mbrAZim, 184)

11527 In the immense majority of examples, *k^hi* occurs with verbs in the Inferential
 11528 (82) or Sensory (84 and 85) (§21.5.2, §21.3.2). However, this not a morphosyntactic

⁹For the context of this example, see (205) (§24.6.3.2).

constraint, and *k^hi* can in principle be combined with verbs in other TAME categories, such as the Factual (§21.3.1) in (86) (*c^ha* rather than the Sensory *nuu-c^ha*), confirming Tournadre and LaPolla's (2014) insight of the necessity of distinguishing *source* and *access* to information when describing evidential systems.

- (86) *pyyk^huu nuu kuu qapi ky-sat wuma zo c^ha k^hi.*
 owl DEM ERG mole INF-kill really EMPH can:FACT SFP
 'The owl is very good at killing moles, it is said.' (28-qapar, 205)

The archaic inferential *k^huu-ti* 's/he said' found in a handful of stories may result from the fusion of this particle with the prefixless stem of the verb *ti* 'say' (§21.5.4).

In addition, the noun *k^hic^ho* 'rumour, hearsay' is a delocutive noun derived from the particle *k^hi* and the comitative *c^ho* (§8.2.5). The etymological relationship between *k^hic^ho* and *k^hi* is made clear by examples like (87), where *k^hic^ho* is glossed as 'saying *pjy-ηu k^hi*', i.e. using the hearsay particle and the Inferential to insist on the fact that one has only heard this information from second-hand sources.

- (87) *tceri u-puu-kui-mto tci pjy-me wo ma, k^hic^ho*
 LNK 3SG.POSS-AOR-SBJ:PCP-see also IFR.IPFV-not.exist SFP SFP rumour
ma nuu ma u-kui-suuz maje. "pjy-ηu
 LNK DEM apart.from 3SG.POSS-SBJ:PCP-know not.exist:SENS IFR.IPFV-be
k^hi, ... pjy-ηu k^hi" nura tu-ti-nuu ma nuu ma
 SFP IFR.IPFV-be SFP DEM:PL IPFV-say-PL LNK DEM apart.from
u-kui-ti puu-me.
 3SG.POSS-SBJ:PCP-say PST.IPFV-not.exist
 'Nobody has ever seen (one-legged demons), there are only rumour, apart from that nobody knows about them. People used to say 'it was (allegedly) ...', but apart from that nobody said anything.' (140510 rkoNJAl, 87-89)

The hearsay particle can be followed by other sentence final particles (such as *wo*, §11.6.2), but there are no examples of it being preceded by other particles.

10.4.4 Particles expressing epistemic modality

In addition to verbal morphology (§21.4, §21.7), epistemic modality is expressed in Japhug by sentence final elements, including the grammaticalized noun *u-mdor* 'colour' (§21.8.3.1) and the particles *t^haj*, *rca* and *ma*.

11557 The particle *t^haj* is borrowed from Amdo Tibetan, where it appears in the
 11558 complex ending *na.t^haj.gi* expressing possibility (translated asかもしれな
 11559 い ‘maybe ...’ in Ebihara 2019: 306–307).

11560 Semantically *t^haj* is close to the possible modality prefix (§21.7.2), as illustrated
 11561 by (88a) and (88b) (see also 15b and 15a in §11.4). It is often followed by the exclau-
 11562 mative *n_x* (allomorph of *nu*, §10.4.5).

- 11563 (88) a. *qapri kuu yui-mtsuy-a t^haj n_x!*
 snake ERG INV-bite:FACT-1SG SFP SFP
 11564 b. *qapri kuu umý-wy-mtsuy-a*
 snake ERG PROB-INV-bite:FACT-1SG
 11565 ‘The snake will perhaps bite me.’ (elicited)

11566 In the overwhelming majority of cases, *t^haj* follows a verb in the Factual Non-
 11567 Past (§21.3.1) to indicate either a probable future event (88a and 90; see also 48,
 11568 §21.3.1.2) or a general statement of uncertain truth value (89).

- 11569 (89) *si uu-mat ra tu-ndze juu-cti. xcaj nuu*
 tree 3SG.POSS-fruit PL IPFV-eat[III] SENS-be.AFF grass DEM
 11570 *mx-ndze t^haj n_x. nyj uu-túu-suuz?*
 NEG-eat[III]:FACT SFP SFP 2SG QU-2-know:FACT
 11571 ‘(The monkey) eats fruits. It probably does not eat grass. Do you know
 11572 (whether it does or not)?’ (19-GzW,6- 8)

11573 It can also express uncertain result in the apodosis of conditional construc-
 11574 tions (with a protasis in the Irrealis (§21.4.1.5, §25.2.1), as in (90)¹⁰ (see also 129,
 11575 §21.4.1.7).

- 11576 (90) *nuu a-tx-fse tce tcet^ha, t^hndzi nuu kuu t^ha “izora*
 DEM IRR-PFV-be.like LNK later demon DEM ERG later 1PL
 11577 *uu-me juu-ηu” a-nuu-susym tce, mý-wy-ndza-j t^haj*
 3sg.POSS-daughter SENS-be IRR-PFV-think[III] LNK NEG-INV-eat-1PL SFP
 11578 ‘(If we do it) this way, the ogre_i will think that we are his_i daughters and
 11579 maybe he_i will not eat us. (160705 poucet5-v2, 32-33)

11580 It can also express a possibly undesirable result as in (91) (§25.5.6).

¹⁰In addition, (90) is an interesting example of hybrid indirect speech (§24.2.5.2), with the verb form *juu-ηu* reflecting the point of view of the ogre, while the 1PL pronoun *izora* and the 3SG possessive *uu-me* ‘his daughters’ represent that of the children.

10 Expressive words and sentence final particles

- 11581 (91) *tce^ha tu-ce-a ma k^hapa ri ku-n^hukun^hke-a tce^ha, n^hkinu,*
 later IPFV:UP-go-1SG LNK yard LOC PRS-DISTR:walk-1SG later FILLER
 11582 <zayin> *tu t^haj*
 noise exist:FACT SFP
 11583 ‘I will go up (to my house) because (now) I am walking in the yard, there
 11584 could be noise (so that we won’t hear each other on the phone).’
 11585 (conversation 2016-02-21)

11586 Other TAME categories are also compatible with *t^haj*, including the Past Im-
 11587 perfective (92) and the Aorist (examples 15b in §11.4 and 13 in §22.1.1.2).

- 11588 (92) *tce nuŋja dtuxpa ma (...) u-tuu-mu nu*
 LNK cow poor.of LNK 3SG.POSS-NMLZ:DEG-fear DEM
 11589 *pui-sax^har zo t^haj pui-sušam-a nyu.*
 PST.IPFV-be.extremely EMPH SFP IPFV-think[III] be:FACT
 11590 ‘I am thinking that the poor cow, she probably was extremely afraid (after
 11591 escaping from a flood and losing a horn in the process).’ (160715 nWNa,
 11592 13-14)

11593 The particle *rca*, which is probably related to the seutive relator noun *u-rca*
 11594 ‘following’ (§8.3.2) and the unexpected focus marker *rcaunu* (§26.1.1.4), occurs
 11595 with verbs in the Sensory or Inferential (93, 94), expressing high probability ‘pre-
 11596 sumably, probably’.

- 11597 (93) *jinde kynte^hu-sŋi ky-mto pui-me tce, pjy-si rca*
 nowadays several-day OBJ:PCP-see PST.IPFV-not.exist LNK IFR-die SFP
 11598 ‘(We) haven’t seen him for several days, he probably died.’ (150827
 11599 mengjiangnv-zh,157)

- 11600 (94) *tce kučungw^h tce, nyki, tu-tupu^h rayri yu^h nu^h-kha*
 LNK former.times LNK FILLER one-household each GEN 3PL.POSS-house
 11601 *nuatcu k^hβya pjy-tu rca.*
 DEM:LOC hand.mill IFR.IPFV-exist SFP
 11602 ‘In former times, there used to be handmills in every house, presumably
 11603 (now they have disappeared).’ (160705 khABGa, 23)

11604 High degree of certainty can be indicated by *ko*, which can be translated as
 11605 ‘indeed, certainly’ (95, 96).

- 11606 (95) *mŋym my-mŋym my-xsi ri, kú-wy-rtob ndxre*
 hurt:FACT NEG-hurt:FACT NEG-GENR:know LNK IPFV-INV-look LNK
 11607 *múj-pe ko.*
 NEG:SENS-be.good SFP
 11608 ‘I don’t know whether (leprosy) hurts or not, but in any case it does not
 11609 look good indeed.’ (25-khArWm, 60-61)

- 11610 (96) *wo, nyki, þur-tur-cqraþ ko, múa-j-tur-naþteuy,*
 INTERJ filler SENS-2-be.intelligent SFP NEG:SENS-2-be.identical
 11611 *ny-wa nu múa-j-tur-ntc^huy ko.*
 2SG.POSS-father DEM NEG:SENS-2-soil SFP
 11612 ‘You are really intelligent, you are not a common man, you are your
 11613 father’s son indeed.’ (Norbzang 2012, 140)

11614 Low degree of certainty on the other hand can be marked by *ma* and *matci*.
 11615 They are particularly common with the defective verb *my-xsi* ‘it is not known’
 11616 (§14.3.4). Their scope is on the complement clause(s) of this verb as in (97) (see
 11617 also 157, §21.4.4).

- 11618 (97) *kv-mto a-pwı-kwı-c^ha tce nuuwı wuma zo pe*
 INF-see IRR-IPFV-GENR:S/O-can LNK DEM really EMPH be.good:FACT
 11619 *tu-ti-nuı þuı-ŋgryl tceri þu maþ*
 IPFV-say-PL SENS-be.usually.the.case LNK be:FACT not.be:FACT
 11620 *my-xsi matci.*
 NEG-GENR:know SFP
 11621 ‘People say that if you succeed in finding it, it is very good (against
 11622 poison), but I don’t know if it is true or not.’ (22-kuwu, 45-46)

11623 Additionally, *ma* is often found with verbs in the Probabilative (§21.7.2, §21.7.2.1)
 11624 or the Rhetorical Interrogative (§21.7.3) prefixes, as in (98) and (99).

- 11625 (98) *nuu-mbri umy-kui-þu-ci ma.*
 SENS-make.noise PROB-PEG-be-PEG SFP
 11626 ‘It looks like (my phone) is ringing.’ (160630 abao,-zh, 98)

- 11627 (99) *li uþry-nuı-jmuıt-a ma.*
 again RH.Q-IPFV-forget-1SG SFP
 11628 ‘I might forget again (some details of the story that I am about to tell
 11629 again).’ (160704 poucet4-v2, 1)

11630 The particle *kuma* results from the fusion of this dubitative *ma* with the inter-
 11631 rogative *kuu* (§10.4.2).

11632 It is possible that these particles originate from the causal linkers *ma* and *mat̪i*
 11633 ‘because’ (§25.5.2), and that their use as dubitative particles arose from an elided
 11634 causal clause (‘I don’t know whether it is true or not because...’) or justification
 11635 clause (§25.5.5) (‘It looks like ... since’).

11636 10.4.5 Particles expressing speaker attitude

11637 The particles described in this section have meanings that are not easily classifi-
 11638 able into any of the previous categories, but some of which contribute to express
 11639 modality.

11640 The particle *nu*, sometimes realized as *n̪y*, occurs in exclamative sentences, in
 11641 particular with degree nominals (§26.1.2.1) and exclamative nouns (§5.1.2.8).

11642 (100) *nua u-t^ho_B* *nura nua-k^hi* *nua ye, nua-tua-scit*
 DEM 3SG.POSS-ground DEM:PL 3PL.POSS-luck SFP SFP 3PL.POSS-2-be.happy
 11643 *nua!*
 SFP

11644 ‘The people on earth (on the ground), how lucky they are, right? How
 11645 happy there are! (150828 donglang, 26)

11646 The particle *ja* is used to express regret that the action in the clause has taken
 11647 place (101).

11648 (101) *pxjk^hu hanuni ci* *nua ma-t_x-tua-fse* *pua-ra* *ja,*
 still a.little INDEF DEM NEG-IMP-2-be.like PST.IPFV-be.needed SFP
 11649 *hanuni ci* *mu-pua-mda* *ja ri*
 a.little INDEF NEG-PST.IPFV-be.the.time SFP LNK
 11650 ‘What a shame, if you could just have (waited) a little bit (before) doing
 11651 that, the time was not yet ready.’ (2014-kW1AG, 635-636)

11652 The function of *lo* / *loβ* is more difficult to pinpoint. It can serve as a marker of
 11653 low degree of certainty (102) and as a rhetorical interrogative (in particular the
 11654 form *loβtci*, §10.4.2)

- 11655 (102) *u-myljab nu kutsy-ldza jamar yzsu loβ. ma kojla*
 3SG.POSS-limb DEM six-long.object about exist:SENS SFP LNK really
 11656 *mu-ky-rtoβ-a ri, u-myljab nura pu-dyn*
 NEG-AOR-look-1SG LNK 3SG.POSS-limb DEM:PL SENS-be.many
 11657 ‘It has about six legs, (I think...) I did not have a good look, but in any
 11658 case it has a lot of legs.’ (21-mdzadi, 7-9)

11659 It is also found in enumerations (§9.2.2.1) on each of the elements (nouns or
 11660 clauses) in the list (103) with a continuative intonation, followed a pause.

- 11661 (103) *u-pi ni yuu fsapab loβ, tuipu loβ,*
 3SG.POSS-elder.sibling DU GEN cattle SFP flour.based.food SFP
 11662 *u-gryl ku-me zo ta-rku-nu*
 3SG.POSS-order SBJ:PCP-not.exist EMPH aor:3→3'-put.in-PL
 11663 (Their parents) gave her two elder sisters cattle and food in great
 11664 quantity.’ (2005 Kunbzang, 151)

11665 11 The structure of the Japhug verb

11666 11.1 Introduction

11667 Japhug is a verbocentric language: nearly half of this grammar (eleven chapters)
11668 is devoted to verbal morphology.

11669 This chapter first presents an overview of the structure of the verb in Japhug,
11670 including the prefixal ([§11.2](#)) and suffixal ([§11.3](#), [§11.4](#)) chains. The final sections
11671 discuss the templatic structure of Japhug verbal morphology ([§11.5](#)) and word
11672 boundaries ([§11.6](#)).

11673 11.2 The prefixal chain

11674 Like other Gyalrongic languages, Japhug has a strongly prefixing verbal morphology.
11675 Inflectional and derivational prefixes constitute two different groups with
11676 almost no overlap, the latter closer to the verb root, and the former further away
11677 from it. For this reason, these two groups are referred to as ‘outer’ and ‘inner’
11678 prefixes.¹

11679 Not all prefixes are tautosyllabic; some only comprise a consonant (for instance
11680 some allomorphs of the translocative such as *c-*), and due to vowel contraction
11681 rules ([§12.3](#), [§14.3.2.7](#)), some combinations of prefixes merge into a single syllable.
11682 The transcription used in this grammar however undoes the effect of vowel
11683 merger to bring clarity to the morphological analysis, and avoid a proliferation
11684 of portmanteau affixes.

11685 11.2.1 Outer prefixes

11686 The template of outer prefixes in finite verb forms is summarized in Table [11.1](#). It
11687 contains six slots, as compared to the four slots in the suffixal chain ([§11.3](#)). This
11688 table does not represent inner prefixes, which are contained within the ‘extended
11689 verb stem’, and discussed below in [§11.2.2](#).

¹Previous accounts of the Japhug verbal template such as [Jacques \(2013b\)](#) do not clearly distinguish between these two prefixal domains.

11 The structure of the Japhug verb

Table 11.1: The template of outer prefixes

-6	-5	-4	-3	-2	-1	0
Modal	Negation	AM	Orientation	second person	Inverse Progressive	Extended verb stem

11690 The minimal verb form only contains the verb stem without any prefix. The
 11691 only finite verb forms with empty prefixal slots are the first or third persons
 11692 ([§14.2.1](#)) or 1/3→3' configurations ([§14.3.2.1](#), [§14.3.2.2](#)) of the affirmative Factual
 11693 Non-Past ([§21.3.1](#)), as in (1). All other finite verb forms require the presence of at
 11694 least one prefix.

- 11695 (1) *yi* / *yi-a*
 come:FACT come:FACT-1SG
 11696 ‘He comes/will come; I (will) come.’

11697 Slot -6 can be filled by the Irrealis *a-* ([§21.4.1.1](#)), the Rhetorical Interrogative
 11698 *uþry-*, the Polar Interrogative *u-*, the Probabilative *umv-* and the Proximative
 11699 Aspect *juu-* prefixes ([§21.6.2](#)). These prefixes are mutually exclusive.

11700 Slot -5 contains the negative prefixes ([§13.1](#)), which also partially encode TAME.
 11701 Only one negative prefix can appear in this position; double negation must be
 11702 expressed with a negative auxiliary ([§13.3](#)).

11703 Slot -4 is restricted to the translocative *çuu-* and cislocative *yu-* Associated Motion
 11704 prefixes ([§15.2.1](#)). These two prefixes are mutually exclusive, and also incompatible
 11705 with motion or manipulation verbs with opposite deixis ([§15.2.3](#)).

11706 Slot -3 corresponds to orientation preverbs ([§15.1](#)). It must be filled in all finite
 11707 forms other than the Factual Non-Past ([§21.3.1.1](#)) and the negative Sensory ([§13.1](#),
 11708 [§21.3.2.1](#)), and only one preverb is allowed in this position. Xtokavian dialects of
 11709 Japhug have an additional slot -3' containing the Inferential *a-* prefix ([§15.1.1.3](#))
 11710 and the Aorist *a-* ([§14.3.2.2](#)), but since these two prefixes have merged with the
 11711 orientation preverbs in Kamnyu Japhug, this slot is not treated as different from
 11712 -3 in this grammar. Although not an orientation preverb, the Apprehensive *çuu-*
 11713 ([§21.7.1](#)) also appears in slot -3.

11714 Slot -2 includes indexation prefixes, including second person *tuu-* ([§14.2.1.2](#)),
 11715 the *ta-* 1→2 and *kuu-* 2→1 portmanteau prefixes ([§14.3.2.3](#)) and the generic S/O
 11716 prefix *kuu-* ([§14.3.2.5](#)). The prefixal element *k(u)-* of the peg circumfix ([§11.4](#)) is
 11717 also located in this slot.

11718 Slot -1 comprises the inverse *-wy* (§14.3.2.7) and the Progressive *asu-* (§21.6.1.1)
 11719 prefixes. These two prefixes only appear on transitive verbs, since they are in-
 11720 compatible with morphologically intransitive verbs. This slot is the only one that
 11721 can be filled by more than one prefix simultaneously, as shown by forms such
 11722 as *pjy-k-́y<wy>z-nyo-ci* ‘he was waiting for him’ in (2) where the inverse *-wy*
 11723 (see §14.3.2.2 and §14.3.3.3 on the function of the inverse prefix in this example)
 11724 is infixated within the *-yz-* allomorph of the Progressive (§12.3, §21.6.1.1).

- 11725 (2) *tce pjy-yi tce qala kuu*
 LNK IFR:DOWN-come LNK rabbit ERG
 11726 *pjy⁻³-k⁻²-́y<wy>z⁻¹-nyo-ci tce*
 IFR.IPFV⁻³-PEG⁻²-<INV>PROG⁻¹-wait-PEGLNK
 11727 ‘(The snow leopard)_i came down. The rabbit was waiting for him_i (there).’
 11728 (140427 qala cho kWrtsAG, 64)

11729 In addition, since the autive *nua-* can also be infixated within the progressive
 11730 (§19.1.2, §11.2.2), slot -1 actually lies at the border between the inner and outer
 11731 prefixal domains.

11732 All of these slots can be filled, as in example (3). Although there are co-occurrence
 11733 restrictions across slots (for instance, some prefixes in -6 such as the Rhetorical
 11734 Interrogative *uþry-* are incompatible with the negative prefixes in -5; additional
 11735 examples are presented in §11.5), it is possible to build verb forms with nearly
 11736 any subset of the six prefixal slots of the outer domain.

- 11737 (3) *qapar kuu nyzo a⁻⁶-my⁻⁵-yu⁻⁴-ty⁻³-tú⁻²-wy⁻¹-ndza*
 dhole ERG 2SG IRR⁻⁶-NEG⁻⁵-CISL⁻⁴-PFV⁻³-2⁻²-INV⁻¹-eat
 11738 ‘(Let us hope that) the dhole will not come to eat you.’ (elicited)

11739 The Sensory Evidential existential verbs *yzzu* ‘exist’ and *maje* ‘not exist’ are
 11740 only compatible with the affixes of slot -2 (the second person and generic *kua-*),
 11741 but in this case these appear as infixes rather than prefixes (§14.2.2). The defective
 11742 verb *krtupa* ‘tell’ cannot take any prefix (§14.3.4).

11743 Non-finite verb forms follow a similar but slightly different template. As shown
 11744 in Table 16.1 (§16.1), participles lack the -2 slot, have strong restrictions on the
 11745 other slots: in -6 only the prospective *ju-* is possible), in -5 only *my-* or *mu-*, in -3
 11746 only type A and B preverbs, and in rare cases in -1 only the progressive. Participal
 11747 prefixes occur between slot -1 and the extended verb stem, and in addition
 11748 some participle forms take a possessive prefix before slot -6.

11749 **11.2.2 Inner prefixes**

11750 Unlike outer prefixes, inner prefixes do not follow a rigid template. The sigmatic
 11751 causative, in particular, can occur recursively (§17.2.7) and its relative position vis-
 11752 a-vis the facilitative (§18.9.2) and reciprocal (§18.4.1) derivations is determined by
 11753 semantic scope (§17.2.8).

11754 Figure 11.1 represents the possible ways in which most inner prefixes (exclud-
 11755 ing the autive, the denominal prefixes, the human antipassive, the distributed ac-
 11756 tion derivation and the subject-oriented facilitative) can be combined with each
 11757 other, excluding cases of lexicalized derivations.² Examples of attested complex
 11758 forms can be found in the following sections:

- 11759 • Antipassive *rṛ-* (APASS): §18.6.9
- 11760 • Applicative *nū(y)-* (APPL): §17.4.4
- 11761 • Sigmatic causative *sū(y)-* (CAUS): §17.2.8
- 11762 • Velar causative *yṛ-* (CAUS2): §17.3.4
- 11763 • Facilitative *nuyū-* (FACIL): §18.9.2
- 11764 • Passive *a-* (PASS): §18.1.6
- 11765 • Proprietive *sṛ-* (PROP): §18.8.6
- 11766 • Reflexive *zṛṛ-* (REFL): §18.3.4, §18.3.6, §18.4.1.2
- 11767 • Tropative *nṛ(y)-* (TROP): §17.5.5

11768 Combinations of more than two inner prefixes are very rare, and mainly in-
 11769 volve lexicalized derivations. Examples include *asṛmumtsʰumtsʰym* ‘inform each
 11770 other’(from *mtsʰym* ‘hear’) (4), which combines an *amu*-reciprocal, a sigmatic
 11771 causative, and a reduplicated reciprocal derivations (see further discussion in
 11772 §18.4.2.5; in 4 and following examples, inner prefixes are colored in red and outer
 11773 prefixes in blue).

- 11774 (4) *yurza kurcat nū z-nū-a-sū-ṛmū-mtsʰū~mtsʰym-nū jnū-ŋū*,
 hundred eight DEM TRAL-AOR-RECIP-CAUS-RECIP-hear-PL SENS-be
 11775 ‘(All) one hundred and eight (boys) went and informed each other.’ (2005
 Norbzang, 90)

²Lexicalized derivations do not necessarily follow these ordering rules, see §17.2.3 and §19.1.6.

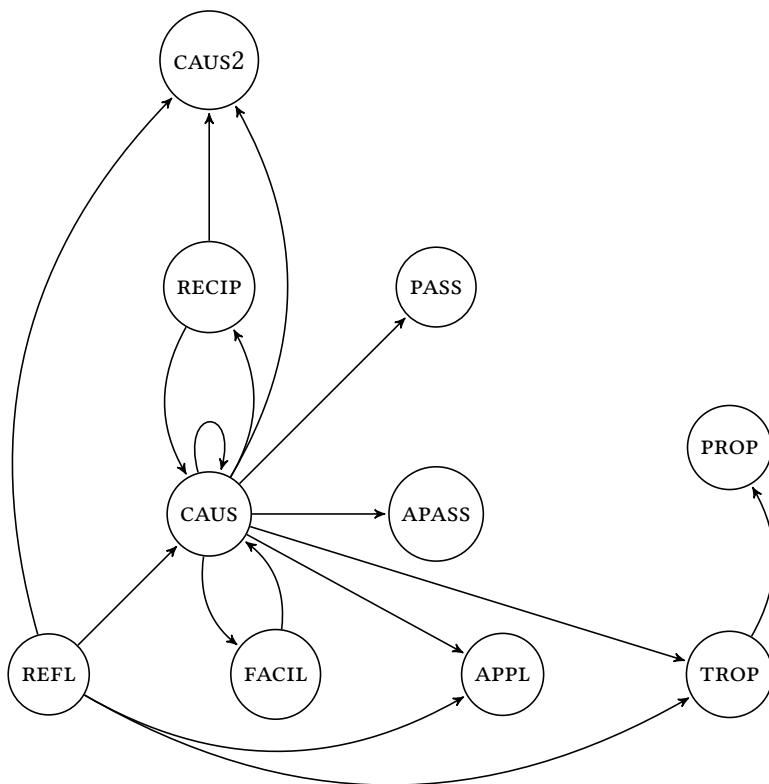


Figure 11.1: The possible linear orders of inner prefixes

₁₁₇₇₇ A common case of non-lexicalized triple derivation is found when a doubly
₁₁₇₇₈ derived verb additionally takes the highly productive autative prefix, as in (5).

- ₁₁₇₇₉ (5) *to-nuu-zyy-cuu-fka-nuu zo jiuu-ŋju.*
 IFR-AUTO-REFL-CAUS-be.full-PL EMPH SENS-be
₁₁₇₈₀ ‘They ate to their full.’ (huli yu shanying-zh, 28)

₁₁₇₈₁ The position of the autative prefix is very unusual (§19.1.2), and not easily rep-
₁₁₇₈₂ resentable in Figure 11.1. In non-contracting verb forms (§12.3), it occurs on the
₁₁₇₈₃ border between the outer and inner prefixal domain, following the inverse (as
₁₁₇₈₄ shown by example 6, with all six outer prefixal positions filled) and preceding
₁₁₇₈₅ the reflexive *zyy-* (example 5 above, see also §18.3.5).

11 The structure of the Japhug verb

- 11786 (6) *w-nu-ra* *nv, a-my-yu-nu-tú-wy-nu-mbi*
QU-SENS-be.needed add IRR-NEG-CISL-PFV-2-INV-AUTO-give
11787 'If he_i needs it_j, then he_i does not have to come and give it_j to you (if he
11788 does not want to)' (elicited)

11789 In the case of contracting verbs (§12.3), the autive is however inserted after the
11790 *a*-element (§19.1.2), even in verbs such as *atyr* 'fall' (7) where it is not analyzable
11791 as a prefix synchronically – the autive is thus infixated within the verb stem.

- 11792 (7) *užo pjua-y<nu>týr my-cʰa.*
3SG IPFV-<AUTO>fall NEG-can:FACT
11793 'It cannot fall (detach) on its own (as its sticks on the clothes).'
11794 (18-qromJoR, 183)

11795 In addition, the autive is infixated within the progressive *asu-* (§19.1.2, §14.3.2.7,
11796 §21.6.1.1), stranded between the outer and inner domain, as shown by (8). The autive
11797 is also infixated when used with the Sensory existential verbs (§14.2.2, §19.1.2).

- 11798 (8) *ca bja zo ku-o<nu>suu-ndza-j*
meat completely EMPH PRS-PROG<AUTO>-eat-1PL
11799 'We are eating only meat.' (2003 kandZislama, 132)

11800 While most of the prefixes in the inner domain follow a layered structure, the
11801 position of the autive, which is determined by phonology and morphology rather
11802 than semantics, is clearly templatic (Bickel & Nichols 2007: 218, §11.5).

11.2.3 Stress

11803 Unlike most Gyalrong languages (Sun 2005, Lin 2012, Gong 2018: 69–81), Japhug
11804 lacks tonal alternations, and stress retraction is very rare. Stress is located by
11805 default on the last syllable of the verb stem (all suffixes from slots +1 to +4, are
11806 unstressed, §11.3), and stress retraction only occurs with three prefixes: the in-
11807 verse *-wy* (slot -1, §14.3.2.7), the negative sensory *múj-* (slot -5, §13.1.1) and the
11808 interrogative *u-* (slot -6, §21.7.4.1).

11.2.4 Phonotactic constraints

11811 There are very strong phonotactic constraints on prefixes in Japhug. Of the fifty
11812 consonant phonemes that are contrastive in onset position (§3.2.1), only ten are
11813 attested in inner prefixes (§11.2.2): the nasal /m/ and /n/ (but not /ŋ/ and /p/),

the glides /j/ and /w/, the dental and alveolo-patalal fricatives (/s/, /z/, /ç/ and /ʒ/), the rhotic /r/ (but not the lateral /l/) and the velar spirant /ɣ/ (but not its uvular counterpart /h/). The vowels of the inner prefixes are limited to /a/, /u/ and /v/. Outer prefixes (§11.2.1) other than person indexation (§14.2.1.2) and orientation preverbs (§15.1.1.1) show the same restriction.

Person indexation prefixes (second person *tu-*, generic *ku-* and the portmanteau *ta-* and *ku-*, §14.2.1.2, §14.8.3), are exclusively built from two unvoiced unaspirated stops, /k/ and /t/. This characteristic is shared with a subgroup of non-finite verb forms (§16.8.1, §16.8.3).

Orientation preverbs stand out among prefixes in allowing aspirated stops, palatal and labial stops, the lateral *l*- and the palatal nasal (§15.1.1.1, §21.5.4), as well as the vowels /u/ and /o/, which suggest a more recent grammaticalization (§15.1.1.4, Jacques 2012a: 92).

11.3 The suffixal chain

Japhug has four inflectional suffixal slots, fewer than the six slots of the outer prefixal domain (§11.2.1). Table 11.2 presents the suffixal template.

Table 11.2: The suffixal template

0	+1	+2	+3	+4
verb stem	Past transitive	First person	Dual/ Plural	Peg

Slot +1 only contains the *-t* suffix found in 1SG→3 and 2SG→3 of the Aorist, Inferential, Past Imperfective and Apprehensive (§21.1.3) of the transitive paradigm (§14.3.2.1). It can only be added on open syllable verb stems. It can only be followed by the 1SG *-a* indexation suffix. The form *-t* is only found in the dialects of Ercha, Kamnyu and Mangi, all dialects east of Rqakyo (including all Xtokavian dialects) have *-z* instead. A sound change **s* → *t* seems to have occurred in Kamnyu, but its conditioning is unclear. This suffix is cognate to the suffix *-z* in Zbu, which also occurs in 3SG→3' forms (Gong 2018: 160–161).

Slot +2 corresponds to the first person indexation prefixes 1SG *-a*, 1DU *-tqi* and 1PL *-ji* (§14.2.1.1, §14.3.2.1).

Slot +3 comprises the second and third person dual *-ndzi* and plural *-nuu* indexation suffixes (§14.2.1.2). This slot cannot be filled if a non-singular first person suffix occurs in slot +2, and only contains at most one suffix. As a result of the

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11843 second constraint, in 3↔3 and 2↔3 configurations, it is not possible to index the
11844 number of both arguments. As shown in §14.3.2.6, these constraints are morpho-
11845 logical and cannot be accounted for by purely phonological rules.

11846 Slot +4 is restricted to the suffixal element -ci of the peg circumfix, which al-
11847 ways occur in combination with the prefixal element k(u)- in slot -2, and can be
11848 elided (§11.4).

11849 When no stress-bearing prefix is present (§11.2.3), the stress invariably falls on
11850 the last syllable of the verb stem. The prefixal slots +2 to +4 are always unstressed,
11851 and their vowel can become unvoiced (§3.7).

11852 Combinations of 1DU/1PL -t̪ci/-j (slot +2) with third or second dual or plural
11853 -ndz̪i/-nu (slot +3) suffixes are prohibited (§14.3.2.6): for instance, †puu-mto-t̪ci-nuu
11854 (AOR-see-1DU-PL, intended meaning: ‘The two of us saw them’) is categorically
11855 rejected. The only possible form is puu-mto-t̪ci (AOR-see-1DU), with neutralization
11856 of the number of the object.

11857 The only verb forms where slots +1, +2 and +3 are filled are the Aorist or
11858 Inferential 1SG→3DU/PL, as in (9). This is the verb form with the highest suffix-
11859 to-prefix ration (3/1).

- 11860 (9) puu-mto-t⁺¹-a⁺²-ndz̪i⁺³
AOR-see-PST:TR⁺¹-1SG⁺²-DU⁺³

11861 ‘I saw the two of them.’ (elicited)

11862 The +4 slot is generally empty, except in two cases: the Inferential of contract-
11863 ing (intransitive) verbs, as in (10), and in combination with the umr- and uβrr-
11864 modal prefixes (§11.4). In the latter case, it is potentially compatible with transi-
11865 tive verbs in the Aorist, and verb forms such as (11) with all four suffixal slots
11866 filled are acceptable, though no example is found in the corpus.

- 11867 (10) to-k-xlulyt-ndz̪i⁺³-ci⁺⁴
IFR-PEG-fight-DU⁺³-PEG⁺⁴

11868 ‘The two of them fought.’ (140428 yonggan de xiaocaifeng-zh, 193)

11869 The maximal suffixed chain as in (11) can only be built by integrating the cir-
11870 cumfix kuu-...-ci and the modal umr- prefix, so that the prefixal chain has at least
11871 three elements (umr-puu-kuu-) constituting four syllables, as compared to the suf-
11872 ffixial chain which contains four elements (-t-a-ndz̪i-ci) and three syllables (4/3
11873 suffix-to-prefix ratio).

- 11874 (11) umr-puu-kuu-mto-t⁺¹-a⁺²-ndz̪i⁺³-ci⁺⁴
PROB-AOR-PEG-see-PST:TR⁺¹-1SG⁺²-DU⁺³-PEG⁺⁴

11875 ‘It looks like I have seen the two of them.’ (elicited)

11876 Stem alternation (§12.2) involves in some cases suffixal elements such as *-t*
 11877 in stem II (§12.2.1; see also §12.2.3) and *-m* in stem III ((§12.2.2) which are not
 11878 considered as part of this suffixal template. However, even if one were to analyze
 11879 those elements as separate suffixes, they would occupy slot +1: the *-t* Past Tense
 11880 transitive suffix and stem III are mutually incompatible, and in any case *-t* can
 11881 only surface if the preceding verb stem has an open syllable. Moreover, evidence
 11882 from bipartite verbs (§11.6.3), in particular example (35) suggests that stem III is
 11883 not suffixal.

11884 Derivational suffixes are very rare in Japhug, and only found in a handful of
 11885 lexicalized examples such as the *-t* applicative (§19.7.2, §19.7.3). Since applicative
 11886 suffix generates a closed syllable stem (for instance *yut* ‘bring’ from *yi* ‘come’),
 11887 this suffix and the transitive Past tense *-t* suffix are mutually incompatible, and
 11888 no verb form has more than four suffixes, even counting frozen morphology.

11889 All of the suffixes presented in Table 11.2 occur in finite verb forms. Non-finite
 11890 verbs in Japhug cannot take any suffix (§16.1).

11891 Japhug clearly is a strongly prefixing language: it is possible to reach seven to
 11892 even potentially nine prefixes in a single verb form by combining the six slots of
 11893 the outer prefixal domain (§11.2) with one to three prefixes of the inner domain
 11894 (see for instance 6), while four suffixes is the upper limit for the suffixal domain.

11.4 The peg circumfix

11.4.1 Morphology

11895 The peg circumfix *kuu...-ci* comprises a prefixal element *k(u)-* inserted in slot -2
 11896 of the outer domain (§11.2.1), and a suffixal element *-ci*, which appears last in the
 11897 suffixal chain, after all indexation suffixes, as shown by (12).

- 11898 (12) *ndzi-yi ra, nuni muu-nx-k-xtuy-nuu-ci*
 3DU.POSS-relative PL DEM:DU NEG-IFR-PEG-meet-PL-PEG
 11899 ‘Their relatives did not meet them (again).’ (2003 zrantCWtWrme, 78)

11.4.2 Optionality of the suffixal element

11900 The *-ci* element of the circumfix is not always present, and thus in some cases
 11901 only the peg prefix *k-* occurs.³ Example (13) with tail-head linkage (§25.1.7) for
 11902 instance shows that the Inferential of *atuy* ‘meet’ can be either *nx-k-xtuy-ci* (the
 11903 most common form) or *nx-k-xtuy* without the *-ci*, without change of meaning. In

³Elision of prefixal *kuu-* is also found in some rare forms, see (17) below.

11 The structure of the Japhug verb

11907 the whole corpus, out of 40 examples of *atuy* ‘meet’ in the Inferential, nine lack
11908 the -ci suffix.

- 11909 (13) *tcendi tcendi tce mts^hu ci jny-k-xtuy-ci. mts^hu*
west west LOC lake INDEF IFR-PEG-meet-PEG lake
11910 *kui-pu~pab ci jny-k-xtuy-ci. tcendre mts^hu*
SBJ:PCP-EMPH~be.black INDEF IFR-PEG-meet-PEG LNK lake
11911 *kui-pu~pab ci jny-k-xtuy tce tce,*
SBJ:PCP-EMPH~be.black INDEF IFR-PEG-meet LNK LNK
- 11912 ‘In the west, he found a lake, he found a lake that was very black. He
11913 found a lake that was very black, and...’ (28-smAnmi 92-94)

11914 Forms with the simple prefigital peg *k-* without -ci are however never found in
11915 utterance-final contexts: they are always followed by a linker such as *tce* (§25.1.6),
11916 as in (13) above, where the two instances of *jny-k-xtuy-ci* have utterance final
11917 intonation and are followed by a pause, while *jny-k-xtuy* starts a new utterance
11918 group.

11.4.3 Functions of the peg circumfix

11919 The circumfix has two different functions in the Kamnyu dialect of Japhug.

11920 First, it occurs in contracting verbs (§12.3) to prevent vowel fusion when a
11921 D-type preverb is found before a contracting verb stem or prefix (§15.1.1.2). In
11922 (12) for instance, without the *k-* prefigital element, the inferential *jny-* would merge
11923 with the verb stem *atuy* as /jnytuy/, becoming undistinguishable from the corres-
11924 ponding Imperfective *jnu-xtuy* (§21.2.1). This function is not found in Xtokavian
11925 dialects of Japhug.

11926 Second, the peg circumfix is found together with Rhetorical Interrogative *wβry-*
11927 and Probabilitative *wmy-* prefixes. In these configurations, the negative prefixes
11928 cannot occur, and only type A orientation preverbs (Aorist, §15.1.1.1) are possible.

11929 The minimal pair in (14) between *wβry-yu* and *wβry-kui-yu-ci* provides an il-
11930 lustration of the semantic function of the circumfix: without it, the Rhetorical
11931 Interrogative generally denotes worry/apprehension that the action could take/
11932 have taken place (14a), while the combination of the Rhetorical Interrogative and
11933 the circumfix has the negative epistemic modality value ‘it seems like X did/does
11934 not Y’ (14b).

- 11935 (14) a. *ny-ŋga k̚-tu-nu-tʂuβ wβry-yu ma*
2SG.POSS-clothes AOR-2-AUTO-sew RH.Q-PEG-be-PEG LNK
11937 ‘You didn’t sew your garment, did you? (worried that the subject
11938 might have sewed his/her garment)’ (elicited)

- 11939 b. *ny-ŋga* *ky-tu-nuu-tʂuŋβ uβry-kuu-ŋu-ci* *ma*
 2SG.POSS-clothes AOR-2-AUTO-sew RH.Q-PEG-be:FACT-PEG LNK
 11940 *nua-nua-spoŋ* *cti*
 SENS-AUTO-have.a.hole be.AFF:FACT
 11941 ‘It looks like you haven’t sewed your garment, it still has a hole.’
 11942 (elicited)

11943 With the Probabilitative *umy-*, the use of the circumfix (15c) is associated with
 11944 a lesser degree of confidence than the corresponding form without it (15a). Tshen-
 11945 dzin explains the meaning of (15c) with the Inferential (15d).⁴

- 11946 (15) a. *umy-jy-azyut*
 PROB-AOR-arrive
 11947 b. *tʂʰuy jy-azyut tʰan*
 probably AOR-arrive SFP
 11948 ‘He probably has already arrived.’ (elicited)
 11949 c. *umy-jy-kuu-zyut-ci*
 PROB-AOR-PEG-arrive-PEG
 11950 d. *jo-zyut uu-mdor*
 IFR-arrive 3SG.POSS-colour
 11951 ‘It seems that he has probably arrived.’ (elicited)

11952 The minimal pair above shows that the circumfix is not a simple secondary
 11953 morphological exponent of the Inferential, but has a specific modal and eviden-
 11954 tial value. However, it is not obvious at this stage that the combination of the
 11955 circumfix with Rhetorical Interrogative and Possible modality prefixes can be
 11956 analyzed compositionally at the synchronic level in the Kamnyu dialect of Ja-
 11957 phug, and I therefore use the arbitrary gloss ‘peg’ for this formative.

11958 The *kuu-* prefixal element competes with indexation prefixes in slot -2 (§11.2.1).
 11959 Since the 2→1 portmanteau *kuu-* prefix has the same shape as the peg prefix, trans-
 11960 sitive verbs can present ambiguity between 2→1 (§14.3.2.3) and 1→3 (§14.3.2.1)
 11961 configurations, as in (16), a verb forms with two possible interpretations.

- 11962 (16) *umy-nuu-kuu-nuu-jmuit-a-ci*
 PROB-AOR-PEG/2→1-AUTO-forget-1SG-PEG
 11963 ‘It looks I forgot about it.’ (*kuu-* = PEG)
 11964 ‘It looks like you have forgotten me.’ (*kuu-* = 2→1)

⁴Note that the Inferential preverbs are not compatible with the Probabilitative prefix (§21.7.2).

11 The structure of the Japhug verb

11965 The second person *tu-* and 1→2 portmanteau *ta-* are dominant in slot -2, and
11966 the peg prefixal element *ku-* disappears in 2→3 (17) and 1→2 configurations (18).

- 11967 (17) *umy-nuu-tuu-nuu-jmut-ci*
PROB-AOR-2-AUTO-forget-PEG
11968 ‘It looks like you have forgotten about it.’ (elicited)

- 11969 (18) *umy-puu-ta-mto-ci*
PROB-AOR-1→2-see-PEG
11970 ‘It looks like I have seen you.’ (elicited)

11971 The inverse prefix, although located in slot -1, is incompatible with the peg
11972 circumfix: both *†umy-nú-wy-nuu-jmut-a-ci* (PROB-AOR-INV-AUTO-forget-1SG-PEG)
11973 and *†umy-nuu-ku-wy-nuu-jmut-a-ci* (PROB-AOR-PEG-INV-AUTO-forget-1SG-PEG) are
11974 incorrect, and the only way to express this meaning is with the Inferential in
11975 combination with the complement-taking noun *w-mdor* (19) (§21.8.3.1).

- 11976 (19) *wzo kuu ny-wy-nuu-jmut-a w-mdor*
3SG ERG IFR-INV-AUTO-forget-1SG 3SG.POSS-colour
11977 ‘It looks like he has forgotten about me.’ (elicited)

11978 Although complex forms such as (15c), (16), (17) or (18) can be elicited, in the
11979 corpus the combination of circumfix with Rhetorical Interrogative or Probabilistic
11980 prefixes only occur on stative verbs in 3SG form, and mainly with copulas,
11981 existential or modal auxiliaries.

11982 The Japhug *-ci* suffixal element is probably cognate with the Mediative *-ca* in
11983 Tshobdun (Sun 2017) and the non-egophoric *ki* in Zbu (Gong 2018), which how-
11984 ever have a much larger distribution. The *k(u)-* prefixal element is relatable to
11985 the non-finite *ku-* prefixes (§16.8.1) and some related finite forms (§14.8.3).

11.5 Templatric vs. layered morphology

11986 While the inner prefixal domain follows a layered structure (except for the autive
11987 prefix, §11.2.2), the outer prefixal chain (§11.2.1) and the suffixal chain (§11.3) are
11988 rather to be described in terms of templatric morphology. Each of the slots in these
11989 chains is rigid in the Kamnyu dialect: there is no free affix ordering as in Kiranti
11990 languages like Chitang (Bickel, Banjade, et al. 2007). We observe four specifically
11991 templatric features (Bickel & Nichols 2007: 216–218).

11993 First, several non-adjacent dependencies (or mutual incompatibilities) are found
 11994 between prefixes, suffixes and stems, reflecting the fact that some TAME cate-
 11995 gories and person configurations are encoded by formatives in different slots.
 11996 Some conspicuous examples are listed below.

- 11997 • Morphological transitivity is encoded by seven independent morphologi-
 11998 cal and redundant features in various slots (§14.3.1).
- 11999 • The Aorist is marked by combining A-type orientation preverbs (slot -3,
 12000 §15.1.1.1), Stem II (§12.2.1) and the past transitive *-t* (slot +1, §11.3).
- 12001 • The Irrealis (§21.4.1.1) requires *a-* in slot -6, a type A preverb in slot -3
 12002 and stem III (§12.2.2.2) when the person configuration allows it, as in (20)
 12003 below.
- 12004 • The peg circumfix (slots -2 and +4, §11.4) occurs in conjunction with either
 12005 some modal prefixes (slot -6) or type D preverbs (slot -3).
- 12006 • Person configuration (direct vs. inverse, §14.3.2.8) is marked by the inverse
 12007 prefix (slot -1, §14.3.2.7), the contrast between stem I and stem III (§12.2.2.2)
 12008 and the past transitive *-t* (slot +1, §11.3). The former is incompatible with
 12009 the latter two (which occur in complementary distribution).

12010 Example (20) illustrates (coloured in red) the non-adjacent dependency be-
 12011 between *a-* (-6), the type A preverb (-3) and stem III.

- 12012 (20) *a-yuu-ty-tuu-t^he*
 IRR-CISL-AOR-2-ask[III]

12013 ‘Come and ask (for her in marriage).’ (150826 liangshanbo zhuyingtai-zh,
 12014 131)

12015 Second, the position of some prefixes in the chain is independent of the se-
 12016 mantic scope of the outer prefixes between themselves, and of their scope with
 12017 regards to the inner prefixes. In particular, the causative prefix, located in the
 12018 inner domain (§11.2.2), has ambiguous scope with the negative (§17.2.4.4) and
 12019 associated motion prefixes (§17.2.4.5).

12020 Third, the allomorphy of more inwards prefixes is in some cases sensitive to
 12021 more outward prefixes: for instance, the allomorphy of the inverse (§14.3.2.7) in
 12022 slot -1 depends on the preceding prefixes: in particular, modal prefixes in slot -6
 12023 do not select the same allomorph as the other prefixes.

12024 Fourth, bipartite verbs (§11.6.3) offer cases of verb forms with more than one
 12025 head.

11.6 Wordhood

11.6.1 Criteria for wordhood

Some languages of the Trans-Himalayan family like Bantawa or Galo present conflicting morphosyntactic and phonological domains (Post 2009; Schiering et al. 2010; Doornenbal 2009) making an unambiguous definition of ‘words’ problematic.

In Japhug, the verb presents several phonological and morphological domains, represented in Table 11.3. Each of the domains is coloured in grey; slots partially included in the domain in certain contexts are represented in light grey.

Table 11.3: Morphological and phonological domains in the Japhug verb

	-6	-5	-4	-3	-2	-1	extended stem	+1	+2	+3	+4	enclitics
A												
B												
C												
D												

Domain A represents non-adjacent dependencies: as argued in §11.5, the suffixal element *-ci* of the peg circumfix in slot +4 (§11.4) is selected by some modal prefixes in slot -6, showing that dependencies across formatives cover the whole verb complex from the beginning of the outer prefixal chain (§11.2.1) to the end of the suffixal chain (§11.3).

Domain B corresponds to the minimal obligatory free form: the suffixal element *-ci* is not included because it is optional (§11.4) and the dual and plural suffixes in slot +3 are also optional in specific conditions (§14.6.1.1).

Domain C indicates the slots that can receive stress. It general is found on the last syllable of the verb stem by default, but some prefixes attract stress (§11.2.3). Slot -6 receives stress when it is filled by interrogative prefix *ú-* followed by a monosyllabic verb form (§21.3.1), or when the other prefixes merge with the inverse *-wy*. Tautosyllabic suffixes are never stressed (§11.3), but 1sg suffix *-a* merges with the last syllabe in some cases (§3.3.1.3).

Domain D correspond to the prefixal slots selecting the allomorph *-wy* of the inverse prefix when directly followed by it, and able to interact with the contracting vowel of the verb stem (§12.3), either by undergoing vowel fusion or by insertion of an epenthetic *-j-*.

12053 These four domains, to which the extended verb stem (including the inner
 12054 prefixes, §11.2.2) can be added, are concentric: the domain boundaries do not
 12055 overlap. In this grammar, **domain A** is chosen as the verbal word, because in
 12056 addition to non-adjacent dependencies, all formatives contained within it have a
 12057 fixed position, and no external element can be inserted.

12058 There are no proclitic markers which could be candidates to be analyzed as pre-
 12059 prefixes in Japhug. Some enclitic linkers and particles are phonologically attached
 12060 on the verb, but there is clear evidence that they cannot be analyzed as suffixes
 12061 (§11.6.2). Bipartite verbs (§11.6.3) offer a more serious challenge to the definition
 12062 of wordhood, but problematic forms are extremely rare and limited.

12063 11.6.2 Enclitics

12064 Some particles and linkers are cliticized on the verb stem, and could seem to
 12065 behave as suffixes.

12066 The sentence final particle *wo* (§10.4.1) is generally a free-standing word, but
 12067 it can optionally be phonologically attached to the verb as in (21). In these cases,
 12068 it bears a stress, possibly analyzable as a effect of intonation.

- 12069 (21) *a-χpi ci puu-fcxt=ó*
 1SG.POSS-story INDEF IMP-tell=SFP
 12070 ‘Tell me a story.’ (140511 yiqianlingyiye yinzi-zh, 30)

12071 There are two pieces of evidence showing that =o is not a verbal suffix. First,
 12072 even in cliticized form, its locus is not specifically the verb, but rather the last
 12073 word of the sentence: in (22), =o cliticized on the predicative noun *uu-mdor* ‘colour’,
 12074 ‘it looks like...’ (§21.8.3.1).

- 12075 (22) *ma qachya yuu uu-me pjjr-cti uu-mdor=o.*
 LNK fox GEN 3SG.POSS-daughter IFR.IPFV-be.AFF 3SG.POSS-colour=SFP
 12076 ‘It looks like she (the main character of the story) was the daughter of a
 12077 fox.’ (150909 xiaocui-zh, 177)

12078 Second, *wo* actually occurs last in the chain of sentence final particles. It fol-
 12079 lows for instance the hearsay particle *k^hi* in (23),

- 12080 (23) *<aizheng> juu-p^hyn k^hi wo*
 cancer SENS-be.efficient HEARSAY SFP
 12081 ‘It can cure cancer, it is said.’ (20-grWBgrWB, 73)

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This hearsay particle is never phonologically cliticized on the verb, and moreover can be separated from the verb by the emphatic particle *zo* (§26.1.1), as in (24).

- (24) *uu-tuu-yvndzo* *saxab* *zo* *k^{hi}i.*
3SG.POSS-NMLZ:DEG-be.cold be.extremely:FACT EMPH HEARSAY
'It is said that (during an eclipse), it is extremely cold.' (29-mWBZi, 115)

The additive linker *ny* occurs in additive repetition (§19.4) and in conditionals (§25.2.1). It is always an enclitic, as indicated by the vowel *y*, which can never be stressed in word-final position in Japhug (§3.3.1). Were *ny* analyzed as a suffix, an additional +5 slot would be necessary, since it can follow the *-ci* suffixal element, as in (25).

- (25) *to-kui-ytc^huuz-ci=ny* *to-kui-ytc^huuz-ci*
IFR-PEG-sneeze-PEG=ADD IFR-PEG-sneeze-PEG
'He sneezed again and again.' (140515 jiesu de laoren-zh, 143)

In conditionals, this linker co-occurs with initial reduplication (§12.4.1.2, §25.2.1). However, although *ny* is the most common linker on the protasis on conditionals, it is not required, and other linkers such as *tce* are also attested, as in (26), and there is no strict non-adjacent dependency between *ny* and reduplication (§11.6.1).

- (26) *nua tur~ty-tui-tut* *tce q^he tce rcanuu* *nyzo rdystar*
DEM COND~AOR-2-say[II] LNK LNK LNK UNEXP:DEG 2SG stone
nua-tui-yβzu
IPFV-2-become
'If you tell (them) about it, you will be turned into stone and...' (150902
hailibu-zh, 84)

In additive function, *ny* is not specific to verbs (§8.2.6), and the emphatic *zo* can be inserted between the verb and this linker (27).

- (27) *tcendyre jy-ari* *ny jy-ari* *zo ny*
LNK AOR-go[II] ADD AOR-go[II] EMPH ADD
'He went again and again.' (Norbzang 2005, 277)

For these reasons, *ny* is not analyzed as a part of the verbal word in Japhug.

12107 **11.6.3 Bipartite verbs**

12108 Bipartite verbs comprise two morphologically active stems, which despite having
 12109 affixes of their own are combined together in one phonological word, sharing
 12110 in some cases whole prefixal or suffixal chains (Jacques 2018a). Following the
 12111 Kirantological tradition (for instance Doornenbal 2009 or Schackow 2015), the
 12112 first verb stem is referred to as V_1 , and the second one as V_2 .

12113 The main features of bipartite conjugation can be explained using $stu=mbat$
 12114 ‘try hard’, ‘do one’s best’, the most common bipartite verb. This verb has four
 12115 possible conjugation patterns, illustrated in Table 11.4 imperative second dual
 12116 form ‘try hard (the two of you)’, which contains one prefix (orientation preverb,
 12117 slot -3, §11.2.1) and one suffix (indexation suffix, slot +3, §11.3).

Table 11.4: Four degrees of morphological integration

Type	Example	V_1 suffix	V_2 prefix
A (quasi-SVC)	$tx\text{-}stu\text{-}ndzi$ $tx\text{-}mbat\text{-}ndzi$ IMP-V ₁ -DU IMP-V ₂ -DU	✓	✓
B (right-dominant)	$tx\text{-}stu = tx\text{-}mbat\text{-}ndzi$ IMP-V ₁ -IMP-V ₂ -DU		✓
C (left-dominant)	$tx\text{-}stu\text{-}ndzi = mbat\text{-}ndzi$ IMP-V ₁ -DU-V ₂ -DU	✓	
D (quasi-compound)	$tx\text{-}stu\text{-}mbat\text{-}ndzi$ IMP-V ₁ -V ₂ -DU		

12118 Type A bipartite verbs are lexicalized serial verb constructions (§25.1.5): the
 12119 two verb stems are not phonologically integrated, and each of them takes both
 12120 prefixes and suffixes. No word can be inserted between *stu* and *mbat* in the corpus,
 12121 unlike other examples of SVC in Japhug. This is however not the case with all
 12122 bipartite verbs. For instance, in the case of *fse=rəŋ* ‘happen so many things’, it
 12123 is possible to repeat the subject, as in (28).

- 12124 (28) *nura pui-fse* *nura pui-rəŋ*
 DEM:PL PST.IPFV-be.like DEM:PL PST.IPFV-last.a.long.time
 12125 ‘All these things happened.’ (many attestations of this sentence, occurs in
 12126 traditional stories typically to avoid repeating sentences when a
 12127 character tells another character what has happened previously)

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In types B and C, the two conjugated verb forms merge phonologically, and either the suffixal chain of the first verb (in the case of the right-dominant B type, where the V_1 has a reduced form and the V_2 preserves the full form) or the prefixal chain of the second one (left-dominant) are removed. For instance, in (29) the right-dominant bipartite verb has only one dual suffix *-ndži*³ on the V_2 , while the prefixal chain *a⁻⁶-ty⁻³-tu⁻²* (IRR-PFV-2) is repeated on both the V_1 and the V_2 . The boundary between the V_1 and the V_2 , transcribed with a clitic sign =, does not conform to the phonological rules of word-internal morpheme boundaries: for instance, no vowel contraction occurs between the Irrealis *a*- and the preceding *-u* in (29), either as *u-a* ⇒ /o/ (§12.3) or *u-a* ⇒ /wa/ (§14.2.1.1). In addition, this bipartite verb form has two stresses, one on each verb stem.

(29) *a-ty-tu-stu=a-ty-tu-mbat-ndži*

IRR-PFV-2-try.hard(1)=IRR-PFV-2-try.hard(2)-DU

‘(While I am gone), may the two of you do your best.’ (smanmi 2003.2, 56)

The prefixal chain must be complete: a partial copy such as †*a-ty-tu-stu=tu-mbat-ndži* with only the second person *tu-* prefix on the V_2 is categorically rejected. Likewise, in left-dominant bipartite verbs, the suffixal chain has to be complete on both the V_1 and the V_2 . This specificity is by no means universal even in Trans-Himalayan: in Kiranti languages for instance, the V_1 generally only preserves a sub-set of the suffixal chain, as illustrated by the Bantawa example (30) below, where the chain *-in-ka* occurs in reduced form *-in* on the V_1 *k^hat-* ‘go’.

(30) *k^har-in lont-in-ka*

go-1/2PL come.out-1/2PL-EXCL

‘We shall rise again.’ (Doornenbal 2009: 254)

In type D, the two verbs come to share the same prefixal and suffixal chain, with no intervening affix between the two verb stems.

Table 11.5 summarizes all bipartite verbs discovered up to now in Japhug. Type C conjugation is only attested with *stu=mbat*.⁵ Question marks indicate that the forms in question are only attested in a few non-finite forms.

Note the important proportion of Tibetan loanwords (=*ray*, *zduy=sjyl*, *nts^hγβ=*, *rga=*, from རྒྱ རିଙ୍ ‘long’, སୁଗୁ-ସୁଗୁ སୁଗୁ-ସୁଗୁ ‘torment’, དକ୍ଷା- ତ୍ୱାନ୍ ‘anxious’, ଦ୍ଵାର୍ ଦ୍ଵାର୍ ‘glad’), respectively.

Bipartite verbs cannot be easily subjected to verbal derivations. The only example that could be elicited is the tropative verb (§17.5) *nṛ-stu-mbat* ‘consider that

⁵In Kiranti languages, by contrast, right-dominant bipartite verbs (with partial suffixal chain on the V_1 , as in 30) are by far the most common option (Jacques 2018a).

₁₂₁₆₀ X tries hard'. Only the quasi-compound form of the bipartite verb can be derived.
₁₂₁₆₁ The derivational prefix *nṛ-* cannot be repeated on the *V₁* and the *V₂* (a form such
₁₂₁₆₂ as †*nṛ-stu=nṛ-stu* is incorrect).

Table 11.5: Bipartite verbs in Japhug

Bipartite verb	A	B	C	D
<i>stu=mbat</i> 'try hard'	✓	✓	✓	✓
<i>mu=cuy</i> 'be terrified'	✓			
<i>χcu=rnaꝝ</i> 'thank a lot'	✓	✓		
<i>nts^hγβ=rlu</i> 'be in a hurry'		✓		✓
<i>fse=rax</i> 'happen so many things'	✓			
<i>k^hrui=jyβ</i> 'be extremely dry'	✓			✓
<i>zduy=sjyl</i> 'suffer extremely'	✓?			✓
<i>rga=le</i> 'be extremely happy'	✓?	✓		
<i>rga=χi</i> 'be extremely happy'	✓?	✓		
<i>NEG + spa = NEG + rka = tu/me</i> 'be guilty/innocent'	✓			✓

₁₂₁₆₃ There is only one bipartite transitive verb, *NEG + spa = NEG + rka = tu/me* 'be guilty/innocent', which is actually even tripartite, since it always occur with an existential verb. It means 'be guilty' when used with the affirmative existential
₁₂₁₆₄ verb *tu* 'exist' and 'be innocent' with the negative one *me* 'not exist' (§13.1.2). The
₁₂₁₆₅ *V₁* and *V₂* require a negative prefix (§13.1.3). Both type A (31, 33) and type D (32)
₁₂₁₆₆ conjugations are attested. The existential verb is always an independent word,
₁₂₁₆₇ and never takes person/number indexation in this collocation.

- ₁₂₁₇₀ (31) *my-tui-spe* *my-tui-rke*
₁₂₁₇₁ NEG-2-be.innocent(1)[III]:FACT NEG-2-be.innocent(2)[III]:FACT
₁₂₁₇₂ *me*
₁₂₁₇₃ not.exist:FACT
₁₂₁₇₄ 'You_{sg} are innocent.' (elicited)

- ₁₂₁₇₅ (32) *my-tui-spa=rka-ndzi* *me*
₁₂₁₇₆ NEG-2-be.innocent(1)-be.innocent(2):FACT-DU not.exist:FACT
₁₂₁₇₇ 'You_{du} are innocent.' (elicited)

₁₂₁₇₈ The verb stems *spa* and *rka* are always in finite form: only the existential verb
₁₂₁₇₉ takes non-finite prefixes. In (33) the subject participle prefix *kui-* occurs on the

11 The structure of the Japhug verb

12177 negative existential *me*, while *spa* and *rka* are found in Factual Non-Past. This
 12178 example suggests that *spa* and *rka* are located in a subject complement clause
 12179 selected by the existential verb (§22.5.1.2).

- 12180 (33) [mk^hyrmaŋ [mx-spa-nuu mx-rka-nuu]
 people NEG-be.innocent(1):FACT-PL NEG-be.innocent(2):FACT-PL
 12181 kui-me] nuu zimk^hym pjy-suu-sat pjy-ra
 SBJ:PCP-not.exist DEM a.lot IFR-CAUS-kill IFR.IPFV-be.needed
 12182 rcanuu, turme ra kui wuma zo pjy-q^ha-nuu
 UNEXPECTED man PL ERG really EMPH IFR-hate-PL
 12183 ‘As he had to have many innocent people killed, people hated him.’
 12184 (hist140514 xiee de shewang-zh, 82)

12185 Although morphologically transitive (§14.3.1), as shown by the presence of
 12186 stem III alternation in SG→3 non-past forms (§12.2.2.1), in examples (31) and (34),
 12187 the direct object is dummy and cannot be overt.

- 12188 (34) mx-spe-a mx-rke-a
 NEG-be.innocent(1)[III]:FACT-1SG NEG-be.innocent(2)[III]:FACT-1SG
 12189 *me*
 not.exist:FACT
 12190 ‘I am innocent.’ (elicited)

12191 Example (35), where both *spa* and *rka* are in stem III form (*spe*= and =*rke*, re-
 12192 spectively) reveals two facts about type D conjugation. First, stem III alternation,
 12193 although historically partially suffixal in origin (§12.2.2.1), is synchronically dis-
 12194 junct from the suffixal chain. Second, although type D forms could appear at first
 12195 glance to be simple compound verbs (§20.12), the presence of stem alternation
 12196 on both *V*₁ and *V*₂, instead of having †*mx-tu-spa-rke* with alternation on the *V*₂
 12197 only, shows that the two verb roots are still morphologically active.

- 12198 (35) mx-tur-spe=rke me
 NEG-2-be.innocent(1)[III]-be.innocent(2)[III]:FACT not.exist:FACT
 12199 ‘You_{sg} are innocent.’ (elicited)

12 Non-concatenative verbal morphology

12202 While Japhug lacks tonal alternations like most Gyalrongic languages (Sun 2005;
12203 Lai 2017; Gong 2018; Zhang 2018), non-concatenative segmental alternations are
12204 common.

12205 This chapter briefly presents derivation onset alternations (§12.1), and then
12206 provides a detailed account of inflectional stem alternations (§12.2), vowel con-
12207 traction (§12.3) and partial reduplication (§12.4) in verbal morphology.

12.1 Onset alternations

12209 While most of the prefixal derivation morphology in Japhug is fairly concatena-
12210 tive, a handful of prefixal morphological processes involve consonantal alterna-
12211 tions.

12212 Prenasalization is found in the anticausative (§18.5) and a handful of frozen
12213 verb forms (§19.7.9, §17.2.2.4). In all cases, it is probably the result of the fusion of
12214 a nasal prefix with an unvoiced stop/affricative, turning it into the corresponding
12215 voiced prenasalized obstruent (§18.5.1.2).

12216 Another type of consonant alternation is the β - \rightarrow b - fortition in the causative
12217 verb *zbras* ‘attach together’ (§17.2.2.7).

12.2 Stem alternations

12219 Northern Gyalrong languages have three verbal stems, labeled I, II and III follow-
12220 ing Sun (2000a) (Situ dialects lack stem III, but some varieties have additional
12221 stems I' and II', see Zhang 2018). Stem I is the default form, stem II mainly occurs
12222 in Aorist and Past Imperfective, and stem III occurs in the Non-Past sg \rightarrow 3 direct
12223 forms of some transitive verbs (§14.3.2.1).

12224 In Japhug, no verb has more than two different stems. Stem II is different from
12225 stem I in only a handful of irregular verbs (§12.2.1), while stem III has been regu-
12226 larized (§12.2.2).

12.2.1 Stem II

12.2.1.1 Morphology

12229 Unlike in Tshobdun (Sun 2000a), Zbu (Sun 2004; Gong 2018) and Situ (Lin 2003;
 12230 Zhang 2018), stem II in Japhug is very limited, and only found in three irregular
 12231 verbs and in a few derivations from them (Table 12.1).

Table 12.1: Stem II alternations in Japhug Rgyalrong

Stem I	Stem II	Derivation
<i>qe</i> ‘go’	- <i>ari</i>	
<i>yi</i> ‘come’	- <i>ye</i>	
<i>ti</i> ‘say’	- <i>tut</i>	
<i>suxqe</i> ‘send, let go’	- <i>sryri</i>	Causative
<i>suti</i> ‘cause to say’	- <i>sutut</i>	
<i>nuqe</i> ‘go back’	- <i>anuri</i>	Vertitive, Autive
<i>nuyi</i> ‘come back’	- <i>nuye</i>	
<i>nryeuqe</i> ‘go around’	- <i>anrruri</i>	Distributed action
<i>nrytuti</i> ‘tell around’	- <i>nrytutut</i>	

12232 The *yi/ye* alternation has an exact correlate in Tshobdun (*wi/wε?*, Sun 2000a:
 12233 175). The verb *ti* ‘say’ has an irregular correspondence with other Gyalrong lan-
 12234 guages, where an affricate onset is found (Tshobdun *tsə* ‘say’, Sun 2000a: 174, Situ
 12235 *tsɬ*, *tsɬis*, Zhang 2018: 318). In Zbu however, a unique alternation between affricate
 12236 and stop is found in this verb (stem I *tsʰə*, stem II *tʰit*, Gong 2018: 225). The corre-
 12237 spondence between the Japhug stem II -*tut* and its Zbu equivalent *tʰit* is regular
 12238 (apart from the aspiration). The irregular paradigm of this verb in Zbu certainly
 12239 has to be reconstructed to proto-Gyalrong. Situ and Tshobdun have generalized
 12240 the affricate to stem II, while Japhug has remade the stem I by generalizing the
 12241 dental stop.

12242 Suppletion is observed in the paradigm of *qe* ‘go’, whose stem II -*ari* is perhaps
 12243 related to the stem I of the verb ‘go’ found in some dialects of Zbu (r̩i, Sun 2004:
 12244 274). Xtokavian dialects of Japhug have *tʰpl* as the stem II of this verb (Lin &
 12245 Luoerwu 2003), a form borrowed from Tibetan རྟା ‘go beyond, pass’.

12246 The transitive verb *suxqe* ‘send, let go’ is the causative of *qe* ‘go’, and its stem
 12247 II presents an irregular vowel merger *suy* + *ari* → *sryri*, instead of expected †*sri*
 12248 or †*asuyri* (§17.2.2.6). Other derivations from *qe* ‘go’ also have suppletion, but the

12249 alternations are regular. The autive and the vertitive *mu-* prefixes (§19.1, §19.2) in
 12250 *nū-če* ‘go by oneself’/‘go back’ are predictably infixes (§11.2.2) within the stem
 12251 II *ari* as *a<nū>ri* (see examples 42 in §19.1.6 and 13 in §6.2.1). The distributed
 12252 action derivation *nycue* ‘go around’ likewise has the expected reduplicated stem
 12253 *-anṛruri*.

12254 The verb *nuyi* ‘come back’, vertitive of *yi* ‘come’, shows the expected stem II
 12255 *nuye* with vowel alternation. Its lexicalized causative *suye* ‘invite’ on the other
 12256 hand, has lost stem alternation, but appears to have generalized stem II (§17.2.2.7).

12.2.1.2 Distribution

12258 In Japhug, stem II is mainly found in the Aorist (§21.5.1.1) and in the Apprehensive
 12259 (§21.7.1.1). The verb *ti* ‘say’ also has stem II *tut* in the irregular Progressive Sensory
 12260 form *nū-ṛsui-tut*, *nū-ṛs-tut* ‘he is/was saying’ (§21.3.2.1). In Zbu, stem II is also
 12261 found in the Progressive (Sun 2000a, Gong 2018: 196).

12262 Unlike Stem III (§12.2.2.2), Stem II is insensitive to person and number in all
 12263 known Gyalrong languages.

12.2.2 Stem III

12.2.2.1 Morphology

12266 In the Kamnyu dialect of Japhug, stem III is fully regular, and applies to all transitive
 12267 verbs with an open syllable stem ending in a non-front vowel in the expected
 12268 contexts (§12.2.2.2).

12269 As presented in Table 12.2, two types of alternations are attested: vowel fronting
 12270 in the case of stems in *-a*, *-u*, *-w* and *-m* suffixation with vowel unrounding for
 12271 stems in *-o*. In Xtokavian dialects, the alternations are less predictable, as some
 12272 verbs in *-u* and *-w* can take the *-m* suffix (Lin & Luoerwu 2003, Jacques 2008a:
 12273 231–234). A cognate suffix *-m* in stem III is also attested in Zbu (Gong 2018: 228–
 12274 229).

12275 Stem III in *-ym* undergoes regular vowel assimilation to *-am-* when followed by
 12276 a 1SG-*a* suffix (§14.2.1.1). For instance, the 1SG→3SG Factual Non-Past of *mto* ‘see’
 12277 is *mtam-a* ‘I (will) see it/him/her’ rather than †*mtym-a*. Stem III with the fronted
 12278 vowel *-e* change to *-i* when followed by *-a*: *ndze-a* ‘I (will) eat it’ is realized as
 12279 [ndzia].

12280 Vowel fronting in stem III originates from the fusion of the verb stem with a **-j*
 12281 suffix (§3.3.3, Jacques 2004: 357, Jacques 2008a: 234), cognate to the ‘transitivity
 12282 marker’ *-ja* in Tshobdun (Sun 2003: 496).

Table 12.2: Stem III alternations in the Kamnyu dialect of Japhug

Stem I	Stem III	type
-a	-e	vowel fronting
-u	-e	
-u	-i	
-o	-y়m	-m suffixation

Rather than analyzing the *-m* suffix as a part of the stem III, it could alternatively be possible to view it as part of the suffixal chain. Under such an analysis, it would be located in slot +1 (§11.3). Bipartite verbs provide evidence against such an analysis however (§11.6.3).

12.2.2.2 Distribution

Stem III only occurs in finite verb forms. It is found in Factual Non-Past (§21.3.1.1), Egophoric Present (§21.3.3.1), Sensory (§21.3.2.1), Imperative (§21.4.2.1), Irrealis (§21.4.1.1) and Imperfective (§21.2.1) of transitive verbs in the 1SG→3, 2SG→3 and 3SG→3' configurations (§14.3.2.1).

Table 12.3 illustrates all five person configurations of the Factual Non-Past where stem III appears and a selection of other configurations where stem I is used instead. It has exactly the same distribution in the other TAME categories listed above.

Stem III encodes four morphosyntactic features, comprising both TAME and person indexation: direct configuration (§14.3.2.8), singular transitive subject, third person object and Non-Past tense.

12.2.2.3 Backformation

An indirect consequence of the perfect regularity of stem III formation (§12.2.2.1) is that in some rare cases, the stem I has been generated from the stem III by applying the alternations backwards.

The stem I of *k^ho* ‘give, pass’ (§14.4.1) regularly corresponds to Tshobdun *k^hi* (as if from proto-Gyalrong **k^haj*). On the other hand, Zbu *k^høm*, *k^həm*, *k^həm* ‘give’ (Gong 2018: 229) and Tangut 瓦¹¹⁰⁵ *k^hjow*^{1,56} (Jacques 2014c: 200–201, proto-Tangut **k^hjVm*) match the Japhug stem III *k^hy়m*. A possible hypothesis to account for these diverging correspondences would be that Japhug and Tshobdun have

Table 12.3: Stem I vs. Stem III in the paradigm of *mto* ‘see’

Person configuration	Stem	Example
1SG→3SG	III	<i>mtam-a</i>
1SG→3DU	III	<i>mtam-a-ndzi</i>
1SG→3PL	III	<i>mtam-a-nuu</i>
2SG→3	III	<i>tui-mtym</i>
3SG→3'	III	<i>mtym</i>
1DU→3	I	<i>mto-tci</i>
2DU→3	I	<i>tui-mto-ndzi</i>
3DU→3'	I	<i>mto-ndzi</i>
3'→3SG	I	<i>yuu-mto</i>

preserved the original verb root, and that Zbu and Tangut have generalized stem III to the whole paradigm. However, there are three reasons why such an explanation is problematic.

First, the verb 看 ¹¹⁰⁵ *k'jow*^{1,56} is highly irregular, and therefore unlikely to have been analogized. Second, Zbu is phylogenetically closer to Tshobdun and Japhug than it is to Tangut, and therefore shared features between Zbu and Tangut are more likely to be due to common retention than to common innovation. Third, there is Japhug-internal evidence that the stem I -o is secondary.

The transitive verb *fkro* ‘put in order’, ‘arrange’, whose stem III is *fkrym* is borrowed from the past tense of the Tibetan verb དྲୟମ-ବ୍ରାମ ‘spread out’. The stem I *fkro* is clearly backformed from the stem III, by overapplication of the -o/-ym alternation. Some speakers treat this verb as having a non-alternating stem *fkrym*, showing that backformation is still an ongoing process.

The case of *fkro* offers a model to analyze Japhug *k'ho* ‘give, pass’ and Tshobdun *k'i* (Jacques 2014c: 201): this verb originally had a stem I **k'hvm* in proto-Gyalrong, preserved in Zbu, but underwent backformation to **k'ay* in the common ancestor of Japhug and Tshobdun, subsequently evolving to *k'ho* and *k'i* by the application of regular sound laws. This is one piece of evidence that Tshobdun is closer to Japhug than it is to Zbu.

The regular stem III *βze* of the verb *βzu* ‘make’ does appear in some non-finite forms such as *c'hu-kw-βze* in (1) (see also 20 in §19.1.4), in the dummy transitive subject construction (§14.3.5), meaning ‘grow’ or in collocation with the noun *w-tsa* (in the meaning ‘be suitable’, §22.4.2.1) for instance.

- 12331 (1) <*hulu*> *nur si ci nuu-ŋu, uu-mat c^huu-kuu-βze*
 gourd DEM tree INDEF SENS-be 3SG.POSS-fruit IPFV-SBJ:PCP-make[III]
- 12332 *ci. tce uu-mat nuunuu, uu-ta^h ku-kuu-xts^hum,*
 INDEF LNK 3SG.POSS-fruit DEM 3SG.POSS-top IPFV:EAST-SBJ:PCP-be.thin
- 12333 *uu-pa nuu-kuu-jpum ci c^huu-βze*
 3SG.POSS-bottom IPFV:WEST-SBJ:PCP-be.thick INDEF IPFV-make[III]
- 12334 *nuu-ŋu tce, nuu <*hulu*> tu-syrmi-nuu.*
 SENS-be LNK DEM gourd IPFV-call-PL
- 12335 ‘The gourd is a tree, one which grows fruits. It grows fruits that are
 12336 thinner on the top part and thicker in the bottom, they are called ‘gourd’’
 12337 (150825 huluwa-zh, 2-3)

Rather than an exception to the rules described in §12.2.2.2, it is simpler to consider that a synchronic verb root *βze* ‘grow’ different from *βzu* ‘make’ has been created by backformation (§12.2.2.3) from finite imperfective forms such as *c^huu-βze* ‘it grows’ in (1). The stem *βze* however never occurs in past tenses (Inferential and Aorist), so that this verb is an example of partial and ongoing backformation.

Another possible example of the same type of backformation is discussed in §19.7.12.

12.2.3 Frozen -t suffix

Three verbs presented in Table 12.4 have two alternative stem forms in free variation, with an optional -*t* suffix. This suffix appears in all person and TAME forms without any semantic change; compare for instance the Imperfective 1PL forms *ku-ryzit-i* (IPFV-stay-1PL, example 132, §16.1.3.7) and *ku-ryzi-j* (IPFV-stay-1PL, example 23, §7.1.7), uttered by the same speaker. The two variants are freely interchangeable, but some speakers use the -*t* suffixed forms more frequently than others.

The optional -*t* is not synchronically relatable to the past tense -*t*, which is restricted to 1SG→3 and 2SG→3 Aorist and Inferential (§14.3.2.1), and never appears on intransitive forms, or to any of the frozen derivation -*t* suffixes (§19.7.2, §19.7.3).

It could be a trace of the stem II -*t* suffix, attested in the verb *ti, tut* ‘say’ in Japhug (§12.2.1), and in a handful of other verbs in Zbu (Gong 2018: 224–225). In this hypothesis, these three verbs used to have a stem II with the -*t* suffix, but at the present stage the two stems have ceased to be morphologically contrastive.

Table 12.4: Frozen -t suffix in free variation

Base form	Alternative stem	Transitivity
<i>amdzuu</i> 'sit'	<i>amdzut</i>	vi
<i>rꝫzi</i> 'stay'	<i>rꝫzit</i>	vi
<i>rꝫci</i> 'pull'	<i>rꝫcit</i>	vt

12.3 Vowel contraction

Contracting verbs have polysyllabic stems whose first syllable is *a*. All of these verbs are morphologically intransitive (§14.3.1), but some of them can have semi-objects or oblique arguments (§14.2.3). The *a*-element can be a valency-decreasing prefix (including the passive §18.1, reciprocal (§18.4 or distributed property §18.7 prefixes), a denominal prefix (the stative denominal *a*- §20.2.1 or a disyllabic denominal prefix with *a* as its first syllable, §20.2), a deideophonic prefix (§20.9.3) or a synchronically non-analyzable element (as in *aro* 'own' or *amdzuu* 'sit').

To represent vowel contraction in a straightforward way, the notation employed in this grammar separates the vowel of the preceding prefix and the contracting by a hyphen, the prefix is transcribed in its base form, and the result of the vowel contraction is indicated after the hyphen. For instance *puu-a-* is to be read as 'prefix *puu-* merging with the contracting vowel as /pa/'', while *puu-ꝫ-* indicates merger of the preverb with the contracting vowel as /pꝫ/. This orthographic rule transcribes contracting vowels in several ways (-ꝫ-, -a- or -o-) depending on the prefix with which they merge (see Table 12.5 below). It is important to note however that there is no contrast between -*a*-, -*ꝫ*- and -*o*- as contracting vowels: there are simply morphologically-conditioned allomorphs.¹

This convention has the advantage of disambiguating verb forms that have become identical due to vowel contraction (for instance, *tr-ꝫ-* vs. *tuu-ꝫ-*, both of which surface as /tr/), and making the verb forms more easily parseable in the corpus.

In Factual Non-Past unprefixed verb forms, the *a*- element surfaces without alternation, as in (§2).

- (2) *nuu ma aro-a me q^he,*
DEM apart.from possess:FACT-1SG not.exist:FACT LNK
'I don't have anything else.' (2003tamukatsa, 112)

¹The *a*- allomorph is used as citation form of contracting verbs.

The prefixes in slots -6, -5 and -4 can occur in direct contact with the contracting vowel *a-* only in Factual Non-Past non-second person forms (§21.3.1.1). The vowel of Rhetorical Interrogative *uβrv-*, Proximative aspect *juu-* (-6) negative *mr-* (-5) and associated motion prefixes *cuu-* and *yuu-* (-4) merge as *a-*: *uβrv-a-* → /uβra-/; *juu-a-* → /ja-/; *mr-a-* → /ma-/; *cuu-a-* → /ca-/ and *yuu-a-* → /ya-/; as shown in *cuu-anbaas-i* ‘we go and hide’ /canbaasi/ in (3), *mr-a-rvt* ‘it has not yet been written’ /marvt/ (example 7, §18.1.1).

- (3) *rŋguw u-ŋgw uutcu cuu-anbaas-i umyx-kuu-nts^{hi-ci}*
 boulder 3SG.POSS-in DEM:LOC TRAL-hide:FACT-1PL PROB-PEG-be.better-PEG
ma,
 LNK
 ‘It looks like we should go and hide in the (hollow) boulder.’ (160706
 poucet6, 65)

The interrogative *u-* in slot -6 does not merge with *a-*. Rather, an epenthetic *j-* consonant is inserted between the two, as in (4) with the verb *atsutsu* ‘have time’.

- (4) *a-wa turju χsua-ŋka tu-ti-a ur-j-átsutsu*
 1SG.POSS-father word three-word IPFV-say-1SG QU-X-have.time:FACT
 ‘Father, do I have time to say three sentences?’ (2003qachga, 173)

In all finite verb forms other than the Factual non-Past, the slot -3 (§11.2.1) is filled, and vowel contraction occurs between the vowel of the preverb and the *a-* element. The rules of contraction with preverbs are detailed in §15.1.1.2, but Table 12.5 presents a summary.

Type C preverbs, which are restricted to transitive verbs, never occur with contracting verbs. In the case of type D preverbs, vowel contraction is avoided by the insertion of the peg circumfix (see §11.4, §15.1.1.2).

These rules are not purely phonological, since the outcome of the vowel fusion with type A preverbs depends on the TAME category. For instance, in the case of the contracting verb *atyr* ‘fall down’, the type A downwards *puu-* preverbs merges as /pvr-/ in the Irrealis and Imperative (for example *a-mr-puu-vtvr* /amvprvtvr/ in 5) and as /pa-/ in the Past Imperfective and Perfective (*puu-atyr* /patvr/ in 6).

- (5) *a-mr-puu-vtvr ky-suiso kuu,*
 IRR-NEG-PFV-fall INF-think ERG
 ‘In order to prevent (the child) from falling down...’ (140426 tApAtso
 kAnWBdaR, 68)

Table 12.5: Vowel contraction rules with orientation preverbs

TAME	Preverb type	Vowel of the preverb	Vowel contraction
Aorist	A	- <i>ɤ</i>	<i>ɤ-a</i> → /a/
		- <i>ɯ</i>	<i>ɯ-a</i> → /a/
Irrealis, Imperative	A	- <i>ɤ</i>	<i>ɤ-ɤ</i> → /ɤ/
		- <i>ɯ</i>	<i>ɯ-ɤ</i> → /ɤ/
Imperfective, Sensory, Egophoric Present	B	- <i>u</i>	<i>u-o</i> → /o/
		- <i>ɯ</i>	<i>ɯ-ɤ</i> → /ɤ/

- 12420 (6) *li pui-atɤr pui-ŋu*
 again AOR-fall SENS-be
 12421 'He fell down again.' (2003 tWxtsa, 104)

12422 In slot -2, since contracting verbs are all intransitive, only the second person
 12423 *tu-* and the generic *ku-* prefixes and the prefocal element *k(u)-* of the peg circum-
 12424 fix can occur before the contracting vowel *a-*. The outcome of vowel contraction
 12425 depends on the TAME category (§14.2.1.2: *tu-a-* /*ta-*/ in Factual Non-Past (*tu-atɤr*
 12426 'you will fall') and Aorist (*pui-tu-atɤr* 'you fell down') and *tu-ɤ-* /*ɤ-*/ Imperfec-
 12427 tive (*pui-tu-ɤtɤr* 'you fall down'), Sensory, Egophoric Present, Irrealis, Imperative
 12428 and Prohibitive (*ma-pui-tu-ɤtɤr* 'don't fall down'). With the peg circumfix, which
 12429 appears in the Inferential, the vowel fusion is always *-k-ɤ-* (see example 12, §11.4).

12430 Slot -1 only contains prefixes associated with transitive verbs, which are there-
 12431 fore incompatible with contracting verbs.

12432 With non-finite verb form prefixes (§16), vowel fusion is always *u-ɤ* / *ɤ-ɤ*, as
 12433 summarized in Table 12.6.

12434 With inner prefixes, vowel contraction is also straightforward and yields *ɤ-*
 12435 in all cases: for instance, the sigmatic causative, applicative and tropative of
 12436 contracting verbs are *sui-ɤ-* /*sɤ-*/ (§17.2.1.3), *nui-ɤ-* /*nɤ-*/ (§17.4.2) and *nx-ɤ-* /*nɤ-*/
 12437 (§17.5.1), respectively. The autive *nui-* cannot undergo vowel fusion and is rather
 12438 infixated after the contracting vowel *a-* (§11.2.2, §19.1.2).

12439 The Progressive prefix *asu-* (§21.6.1.1), located in slot -1 (§11.2.1), can undergo
 12440 vowel contraction in ways similar to those of contracting verbs, summarized in
 12441 Table 12.7. The non-contracting autive *nui-* and inverse *-wy* prefixes are rather
 12442 infixated between the *a-* and the *-sui/z-* elements.

Table 12.6: Vowel contraction with non-finite prefixes

Prefix	Vowel contraction
S/A participle <i>ku-</i>	<i>ku-ꝝ-</i> / <i>kꝝ-</i> /
P participle <i>kꝝ-</i>	<i>kꝝ-ꝝ-</i> / <i>kꝝ-</i> /
Oblique participle <i>sꝝ-</i>	<i>sꝝ-ꝝ-</i> / <i>sꝝ-</i> /
Infinitive <i>kꝝ-/ku-</i>	<i>kꝝ-ꝝ-, ku-ꝝ-</i> / <i>kꝝ-</i> /
Degree nominal <i>-tu-</i>	<i>-tu-ꝝ-</i> / <i>-tꝝ-</i> /
Action nominal / Dental infinitive <i>tu-</i>	<i>tu-ꝝ-</i> / <i>-tꝝ-</i> /

Table 12.7: Vowel contraction of the Progressive prefix

	Slot	Prefix	Transcription	Contracted forms
Past Imperfective	-3	<i>puu-</i>	<i>puu-asuu-, puu-az-</i>	/pasuu-/, /paz-/
Egophoric Present	-3	<i>ku-</i>	<i>ku-osuu-, ku-oz-</i>	/kosuu-/, /koz-/
Sensory	-3	<i>jnuu-</i>	<i>jnu-ꝝsuu-, jnu-ꝝz-</i>	/jꝝsuu-/, /jꝝz-/
Second person	-2	<i>tuu-</i>	<i>tuu-ꝝsuu-, tuu-ꝝz-</i>	/tꝝsuu-/, /tꝝz-/
2→1	-2	<i>kuu-</i>	<i>kuu-ꝝsuu-, kuu-ꝝz-</i>	/kꝝsuu-/, /kꝝz-/
peg	-2	<i>-(kuu)-</i>	<i>k-ꝝsuu-, k-ꝝz-</i>	/kꝝsuu-/, /kꝝz-/
Inverse	-1	<i>wy-</i>	<i>-ꝝ<wy>suu-, ꝝ<wy>z-</i>	/ó(y)suu-/, /ó(y)z-/

12443 Vowel contraction is not restricted to the prefical verbal template. Nouns whose
 12444 stems begin in *a-* are extremely few, but do present some instances of vowel con-
 12445 traction (§5.1.1.1). Vowel fusion involving the first person suffixes is discussed in
 12446 §14.2.1.1.

12.4 Partial reduplication in verbal morphology

12.4.1 Initial reduplication

12449 Verb-initial reduplication has a number of morphosyntactic functions, involving
 12450 clause linking (conditionals §12.4.1.2, temporal clauses (§12.4.1.3), expressing in-
 12451 crease of degree (§12.4.1.4), totality (§12.4.1.5) or temporal resilience (§12.4.1.6).
 12452 With the possible exception of its use in the protasis of conditionals, all of the

functions of the initial reduplication present an iconic component typical of reduplication crosslinguistically.

Initial reduplication belongs to inflectional morphology. The only cases of lexicalization involve grammaticalization of reduplicated finite verb form into a discourse marker (see §9.1.5.1 and §12.4.1.2 below).

12.4.1.1 Morphophonology

While initial reduplication follows the general rules of partial reduplication (§4.1), two additional rules have to be taken into account.

First, the outcome of the reduplication of the negative prefix *mu-* is *mu~mr-* with vowel alternation (§13.1.1), not distinguishable from that of the prefix *mr-*.

Second, when the initial syllable of the word contains more than one morpheme, as in the case of the *c-* or *z-* allomorphs of the translocative prefix combined with an orientation preverb (§15.2.1.2), reduplication can disregard morpheme boundaries, resulting in a replication of the two morphemes: *c-ky-ts^{hi}i-t-a* (TRAL-AOR-drink-PST:TR-1SG) thus yields *c-kuu~c-ky-ts^{hi}i-t-a* as in (7). Tshendzin however also accepts reduplication of the first morpheme only, reduplicated with addition of *-uu* (*cuu~c-ky-ts^{hi}i-t-a*).

- 12470 (7) *c^ha ckuu~c-ky-ts^{hi}i-t-a zo lu-βzi-a*
 alcohol ITER~TRAL-AOR-drink-PST:TR-1SG EMPH IPFV-be.drunk-1SG
 12471 *ju*
 be:FACT

12472 ‘Each time I go and drink alcohol I get drunk.’ (elicited)

Example (8) illustrates a third possible pattern, with reduplication of the orientation preverb *c-tr-kuu-ts^hyt* ⇒ *c-tuu~tr-kuu-ts^hyt* without affecting the associated motion marker.

- 12476 (8) *kuuki turme kura c-tuu~tr-kuu-ts^hyt zo nuu*
 DEM.PROX person DEM:PL TRAL-TOTAL~AOR-SBJ:PCP-try EMPH DEM
 12477 *pjy-wy-sat-nui.*
 IFR-INV-kill-PL

12478 ‘All of these men who had went and tried (to discover the princesses’ secret) were killed.’ (140508 shier ge tiaowu de gongzhu-zh, 33)

12480 12.4.1.2 Protasis of conditional

12481 There are three possibilities in Japhug to mark the verbs in the protasis of con-
 12482 ditionals (§25.2.1): Irrealis (§21.4.1.5), Interrogative *u-* (§21.7.4.2) and initial re-
 12483 duplication. In the latter two cases, the verb is generally followed by the additive
 12484 linker *ny*, as in (9).

- 12485 (9) *a-tciu tur-tui-ŋu ny, pur-ta-suxcxt nuu ci nur-ndum*
 12486 1SG.POSS-son COND~2-be:FACT ADD AOR-1→2-teach DEM once IMP-read
 12487 *ra*
 12488 be.needed:FACT
 ‘If you are my son, then recite (the mantra) that I have taught you.’
 (Norbzang 2012, 221)

12489 Conditional reduplication interacts with TAME categories. For instance, redup-
 12490licated Aorist can be used to refer to hypothetical future events as in (10). With-
 12491out the *ny* linker, reduplicated Aorist can be interpreted as Iterative coincidence
 12492 (§12.4.1.3).

- 12493 (10) *tua~tua-tut ny tce pjui-ta-sat ŋu*
 12494 COND~AOR-2-say[II] ADD LNK IPFV-1→2-kill be:FACT
 ‘If you tell (them) about (it), I will kill you.’ (150901 changfamei-zh, 54)

12495 The scope of the protasis can go beyond the clause containing the reduplicated
 12496 verb. In (11), the protasis contains two clauses, the first one headed by the verb
 12497 *muu~my-puu-pe* with reduplicated conditional, and the second one with the verb
 12498 *tu-kuu-ŋke* without conditional marking.

- 12499 (11) *tceri tua-mypa kuni, tua-xtsa muu~my-puu-pe*
 12500 LNK GENR.POSS-sole also GENR.POSS-shoe COND~NEG-PST.IPFV-be.good
 12501 *cʰondyre, tɔ-rɔaŋ kui-ŋŋji tu-kuu-ŋke qʰe,*
 COMIT INDEF.POSS-time SBJ:PCP-be.long IPFV-GENR:S/O-walk LNK
 12501 *tua-mypa ri cimbyrom tu-ŋke ŋŋryl.*
 GENR.POSS-sole LOC blister IPFV-put.in[III] be.usually.the.case:FACT
 12502 ‘On the soles too, if one has had bad shoes, and walked for a long time,
 12503 blisters will form on one’s soles.’ (27-tWfCAL, 139)

12504 The reduplicated conditional *pui~pui-ŋu* of the Past Imperfective of the cop-
 12505 ula *ŋu* ‘be’ has been grammaticalized as a topic marker *pupuiŋunr* ‘as far as... is
 12506 concerned’ (§9.1.5.1).

12507 **12.4.1.3 Iterative coincidence**

12508 One of the meaning of initial reduplication with verbs in Aorist form is iterative
 12509 coincidence (Jacques 2014a: 295–296). In this biclausal construction, the first
 12510 clause with the reduplicated verb expresses the repetition of an event ‘every time
 12511 X’ (§25.3.1), and the second clause (with a main verb in the Imperfective) the re-
 12512 resulting situation, as in (12).

- 12513 (12) [kuiki tc^hemypuu ki si u-kui-p^hut
 DEM.PROX girl DEM.PROX wood 3SG.POSS-SBJ:PCP-cut
 12514 tu-tr-ye zo], nuunu rgynmuu nuu yuu ui-si
 ITER~AOR:UP-come[II] EMPH DEM old.woman DEM GEN 3SG.POSS-wood
 12515 puu-p^hut, ui-tuu-ci z-nuu-re,
 IPFV-cut 3SG.POSS-INDEF.POSS-water TRAL-IPFV:WEST-fetch[III]
 12516 ‘Every time the girl came to cut firewood, she would cut firewood for the
 12517 old woman and fetch water for her.’ (150829 taishan zhi zhu-zh, 33)

12518 Although the semantic relationship between the two clauses is more a matter
 12519 of temporal relationship rather than strict causality (for instance in example 12),
 12520 this construction is clearly a subcase of the reduplicated conditional (§12.4.1.2).

12521 **12.4.1.4 Incremental**

12522 Verb-initial reduplication with adjectival stative verbs can express a gradual in-
 12523 crease of degree ‘become more and more X’. This function occurs with TAME
 12524 categories which have an inchoative meaning when used with stative verbs: the
 12525 Imperfective (§21.2.6) as in (13) and (14), the Aorist (§21.5.1.3) and the Inferential
 12526 (§21.5.2.4).

- 12527 (13) zngri my-kui-t^hot ci, nuu syz hanuni kui-t^hot
 star NEG-SBJ:PCP-be.bright INDEF DEM COMP a.little SBJ:PCP-be.bright
 12528 ci, nuu syz hanuni kui-t^hot ci, nuu syz hanuni
 INDEF DEM COMP a.little SBJ:PCP-be.bright INDEF DEM COMP a.little
 12529 kui-t^hot, tce kui^hde ki tu-fse tce, [...] t^hi
 SBJ:PCP-be.bright LNK four DEM.PROX IPFV-be.like LNK downstream
 12530 t^hui-ari ui-juja c^hui~c^hui-t^hot zo
 AOR:DOWNSTREAM-go[II] 3SG.POSS-following INCR~IPFV-be.bright EMPH
 12531 puu-ηu tce,
 SENS-be LNK
 12532 ‘(The constellation of the earthworm comprises) one non-bright star,
 12533 another one slightly brighter, another one slightly brighter, another one

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12534 slightly brighter, four (stars) like this (...), becoming brighter as they go
12535 downstream.' (29-mWBZi, 31-33)

12536 Verb-initial reduplication can be combined with verb repetition and the additive linker *ny* to put emphasis on the steadiness of the increase, as in (14).
12537

- 12538 (14) *zuruzzyri tce c^hui~c^hui-my^{ci}-ndzi ny c^hui~c^hui-my^{ci}-ndzi tce*
12539 progressively LNK INCR~IPFV-be.rich-DU ADD INCR~IPFV-be.rich-DU LNK
'They progressively became richer and richer.' (02-deluge2012, 132)

12540 The negation *mu-* of the Imperfective, reduplicated as *mu~my-*, can express
12541 gradual decrease, as in (15).

- 12542 (15) *t^lndzi nu rca, tur~tu-c^ha zo pjy-cti. tcendyre,*
demon DEM UNEXP:FOC INCR~IPFV-can EMPH IFR.IPFV-be.AFF LNK
12543 *wzo nuuu tce zuruzzyri tce, mu~my-pur-c^ha zo*
3SG DEM LNK progressively LNK INCR~NEG-IPFV-can EMPH
12544 *pjy-cti tce*
IFR.IPFV-be.AFF LNK
12545 'The demon was becoming stronger and stronger, and he was weaker and
12546 weaker.' (140513 abide he mogui-zh, 81)

12.4.1.5 Totalitative

12547 Totalitative reduplication occurs on the main verb of relative clauses (§23.3.2),
12548 expressing universal quantification (§9.1.3.1) of the relativized referent. It is at-
12549 tested in participial relatives (§16.1.1.2), finite relatives (§23.2.2) and also some
12550 partially lexicalized participles (§16.1.1.7).

12551 In the case of participial relatives, the reduplicated syllable is the first syllable
12552 of the verb other than the possessive prefix, either the subject participle prefix
12553 *ku-* (16), the object participle *ky-* (17) or an orientation preverb (18).

- 12554 (16) *laχtc^ha yotcu ny-ky-suuso zo nuuu, ny-mpaŋ,*
thing where 2SG.POSS-OBJ:PCP-think EMPH DEM 2SG.POSS-eye
12555 *ny-rna, ny-cna c^ho ra [ku~kuu-spor]* nuu
2SG.POSS-ear 2SG.POSS-nose COMIT PL TOTAL~SBJ:PCP-have.a.hole DEM
12556 *w-ŋgu tce a-ky-tuu-rke q^he*
3SG.POSS-in LOC IRR-PFV:EAST-2-put.in[III] LNK
12557 'Whatever things you want (from the granary), put it in your eyes, your
12558 ears, your nose etc, all the holes in your body.' (31-deluge, 138)

- 12560 (17) *wuma zo nuu-pe nd̥re, [kur~ky-suso]* nuu nuu-fse
 really EMPH SENS-be.good LNK TOTAL~OBJ:PCP-think DEM SENS-be.like
 12561 ‘It is very nice, it is like everything that (I) want.’ (2011-04-smanmi, 214)

- 12562 (18) *tce uu-t^hycu prysc^huu ra [tu~ty-kuu-ruak^hyrlxn]*
 LNK 3SG.POSS-downstream TOPO PL TOTAL~AOR-SBJ:PCP-build.house
 12563 *kuu nuu-rdystas^h nuu ntsuu s-c^hy-nuu-ru-nuu*
 ERG 3PL.POSS-stone DEM always TRAL-IFR:DOWNTSTREAM-AUTO-fetch-PL
 12564 *tce to-nuu-ntc^hoz-nuu.*
 LNK IFR-AUTO-use-PL
 12565 ‘All people from Praskyu down there who built/repaired their houses
 12566 went there and took stones to use for themselves.’ (140522 Kamnyu zgo,
 12567 196)

12568 In finite relatives, the verb lacks any overt nominalization marker other than
 12569 the reduplication itself. In this construction, the relativized elements are either
 12570 direct objects (as in 19 and 20 below), semi-objects or goals, but never subjects
 12571 (§23.2.2).

- 12572 (19) *uu-ro nuura [icq^ha puu-puu-fcat-a] nuura kuu tce tce*
 3SG.POSS-rest DEM:PL just.before TOTAL~AOR-tell-1SG DEM:PL ERG LNK LNK
 12573 *sujno tu-ndza-nuu*
 grass IPFV-eat-PL
 12574 ‘The rest, all the (other animals) that I have told about just before eat
 12575 grass.’ (05-khWna, 46)

- 12576 (20) *nuu [spuu~spe] nuu to-nyrmi ri tyte <zhima>*
 DEM TOTAL~be.able.to:FACT DEM IFR-call.name LNK that.is sesame
 12577 *ky-ti nuu ny-nuu-jmuit*
 INF-say DEM IFR-AUTO-forget
 12578 ‘He called the names of all (the crops) he knew, but forgot to say ‘sesame’.’
 12579 (140512 alibaba-zh, 109)

12580 Finite transitive verbs with totalitative reduplication and a 1sg subject can op-
 12581 tionally take plural indexation (§14.3.2.1) corresponding to the relativized direct
 12582 object with universal quantification. Object plural indexation in this case is rare
 12583 (it is absent for instance in 19 above), and only one example is attested in the
 12584 corpus: *puu~puu-mto-t-a-nuu* (TOTAL~AOR-see-PST:TR-1SG-PL) ‘all those that I have
 12585 seen’ (60, §14.3.2.6).

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12586 The totalitarian subject participle of the existential verb *tu* ‘exist’ can take a
12587 possessive prefix, which is interpreted as a possessor, as in *a-kuu~kuu-tu* 1SG.POSS-
12588 TOTAL~SBJ:PCP-exist ‘everything that I have’. No other totalitarian verb form al-
12589 lows possessor prefixation. In particular, since the subject participles of transitive
12590 verbs require a possessive prefix coreferent with the object (§16.1.1.1), totalitarian
12591 reduplication is incompatible with these forms. For instance, to express the mean-
12592 ing ‘all those who help me’, forms such as *†a-tu~tu-kuu-qur* (1SG.POSS-TOTAL~IPFV-
12593 SBJ:PCP-help) or *†a-kuu~kuu-qur* (1SG.POSS-TOTAL~SBJ:PCP-help) are unacceptable,
12594 and universal quantification has to be expressed with other means, for instance
12595 *a-tu-kuu-qur t^hamtçxt* (1SG.POSS-IPFV-SBJ:PCP-help all).

12596 Totalitarian reduplication of transitive subject participle is only possible if no
12597 possessive prefix is present (see 56, §23.3.2).

12.4.1.6 Emphatic autive

12598 When occurring in word-initial position, the autive prefix *nu-* can be reduplicated
12599 to express emphatic permansive ‘still X (regardless of whatever may hap-
12600 pen)’, and such verb form can be repeated with the additive linker *ny*, as in (21).

- 12601 (21) *txt^ho nuu piupuunjnx, tce nuu my-fse tce tcendyre*
12602 pine DEM as.for LNK DEM NEG-be.like:FACT LNK LNK
12603 *nu-jwas nuu nuu-nuu-tu ny nuu-nuu-tu*
12604 3SG.POSS-leaf DEM EMPH~AUTO-exist:FACT ADD EMPH~AUTO-exist:FACT
12605 *q^he*
12606 LNK
12607 ‘As for the pine, it is not like (the other trees), (whatever happens), its
12608 leaves (needles) are still there.’ (07-tAtho, 16)

12609 The reduplicated autive should not be mistaken with the combination of a type
12610 A ‘westward’ orientation preverb *nu-* with the autive in spontaneous function
12611 (§19.1.4) as in (22).

- 12612 (22) *uuzo nuu-nuu-me cti.*
12613 3SG AOR-AUTO-not.exist be.AFF:FACT
12614 ‘(The wart) disappeared by itself.’ (24-pGArtsAG, 53)

12.4.2 Verb stem reduplication as secondary exponence

12615 Prefixal partial reduplication of the verb stem is a secondary exponence, used in
12616 combination with a prefix, in several productive verbal forms listed in Table 12.8.

12615 Stem reduplication occurs in two converbs, the gerund (§16.6.1 and the purpo-
 12616 sive converb (§16.6.2), together with a *sṛ(z)*- prefix cognate to that of the oblique
 12617 participle (§16.1.3).

12618 It is also found in four regular derivations: reciprocal (§18.4.1, on the *a-* prefix
 12619 see §20.10.3), distributed action (§19.4), auto-evaluative (§19.5) and attenuative
 12620 (§19.6). The attenuative differs from all other cases in that the vowel of the redu-
 12621 plicated syllable is in some cases *-ṛ-* rather than *-u-*.

Table 12.8: Productive verbal forms with stem reduplication and prefix-
 ation

Function	Example	Reference	
Gerund	<i>mu</i> ‘fear’	<i>sṛ-muu~mu</i> ‘fearing’	§16.6.1
Purposive converb	<i>jmut</i> ‘forget’	<i>u-mṛ-jnu-sṛ-jmu~jmut</i> ‘in order not to forget’	§16.6.2
Reciprocal	<i>rqoṣ</i> ‘hug’	<i>a-rqu~rqoṣ</i> ‘hug each other’	§18.4.1
Distributed action	<i>mtsar</i> ‘jump’	<i>nṛ-mtsu~mtsar</i> ‘jump around’	§19.4
Auto-evaluative	<i>mpčyr</i> ‘be beautiful’	<i>znr-mpču~mpčyr</i> ‘think of oneself as beautiful’	§19.5
Attenuative	<i>wyrum</i> ‘be white’	<i>a-yṛ~yrum</i> ‘be whitish’	§19.6

12622 The locus of reduplication is the last syllable of the verb stem, disregarding in-
 12623 dexation suffixes. When the verb stem contains more than one syllable, the redu-
 12624 plicated syllable is infixes. For instance, the gerund of *nṛre* ‘laugh’ is *sṛz-nṛṛu~re*
 12625 ‘laughing’: the partially replicated material *-ṛu-* occurs between the two syllables
 12626 *nṛ-* and *-re* of the verb stem. Additional reduplication is blocked on lexically redu-
 12627 plicated verb stems such as *ruru* ‘guard, take care of’ (§19.7.11) or *nuqambumbjom*
 12628 ‘fly’: triplication is not attested in Japhug, unlike in Stau (Gates 2017).

12629 Non-productive suffixal partial reduplication is found in the antipassive (§18.6.5)
 12630 and distributed action derivation (§19.4.2.1).

12631 Irregular partial reduplication with *-oṣ* or *-um* in the replicated syllable instead

12632 of regular *-u* are also attested (for instance *nv̥umbar* ‘play around’ from *nv̥bar*
 12633 ‘have a good time’, §19.4.2.2).

12634 **12.4.3 Emphatic reduplication**

12635 Emphatic reduplication is a partial reduplication in *-u* targeting the final syllable
 12636 of the stem like other cases of verb stem reduplication (§12.4.2). This inflectional
 12637 reduplication has several related functions.

12638 With adjectival stative verbs, emphatic reduplication indicates a high degree,
 12639 opposite of the attenuative reduplication (§19.6): compare for instance *qarju~rje*
 12640 ‘be deep yellow’ vs. *aqarju~rje* ‘be yellowish’. Reduplicated adjectival verbs are
 12641 almost always attested in participial form, as in (23).

- 12642 (23) *tc^heme kui-mpcu~mpcr ci*
 girl SBJ:PCP-EMPH~be.beautiful SBJ:PCP-EMPH~be.good INDEF
 12643 *nx-cya kui-xtcu~xtci ci a-nu-tu- $\gamma\beta$ zu*
 2SG.POSS-tooth/age SBJ:PCP-EMPH~be.small INDEF IRR-PFV-2-become
 12644 *smuylm*
 prayer
 12645 ‘May you become a very beautiful, nice young girl.’ (Norbzang 2012, 264)

12646 Rare examples of emphatic adjectival verbs in finite form are however also
 12647 found in the corpus, in (24).

- 12648 (24) *u-u ku nura tce nv̥ki, u-ky χ cy ℓ nura li*
 3SG.POSS-head DEM:PL LNK FILLER 3SG.POSS-top.head DEM:PL again
 12649 *nuu-qarje q^he nuu-wyru~wyrum kui-fse.*
 SENS-be.yellow LNK SENS-EMPH~be.white SBJ:PCP-be.like
 12650 ‘It is yellow and very white on the top of its head.’ (24-ZmbrWpGa, 24)

12651 With the negative existential verb *me* ‘not exist’, emphatic reduplication indi-
 12652 cates radical non-existence ‘not (have/exist) ... at all’, as in (25).²

- 12653 (25) *nuu-wa pu-nnuu-muu~me cti*
 2SG.POSS-father PST.IPFV-AUTO-EMPH~not.exist
 12654 ‘You never had a father at all.’ (Norbzang 2012, 144)

²In (25), the mother of the character Padma ’Od’bar, who asked her about the identity of father, gives this answer in the hope that her son will not try to find the truth about the disappearance of his father and thereby run into a mortal danger.

12655 Emphatic reduplication also occurs with modal verbs such as the semi-transitive
 12656 *rga* ‘like’ (26) and the transitive *spa* ‘be able to’ (27) to express high degree.

- 12657 (26) *kui-rgu~rga zo turme ra mage-nuu ma*
 SBJ:PCP-EMPH~like EMPH people PL not.exist:SENS-PL LNK
 12658 ‘There are no people who like it a lot.’ (160706 thotsi, 24)

- 12659 (27) *pya kx-ruucmi kur-spur~spa nuu kuu ...*
 bird INF-speak SBJ:PCP-EMPH~be.able DEM ERG
 12660 ‘The bird who was able to speak very well (said).’ (Norbzang 2012, 26)

12661 Often in combination with the autive *nuu-* (§19.1.4), emphatic reduplication oc-
 12662 curs in free-choice correlatives and in universal concessive conditional construc-
 12663 tions (§25.2.3.3) as in (28), without any constraint of the verb category.³

- 12664 (28) *tuu-ji sna tce, [tc^{hi} l̥y-wy-nuu-juu~ji] zo*
 INDEF.POSS-field be.good LNK what AOR-INV-AUTO-EMPH~plant EMPH
 12665 *pe*
 be.good:FACT
 12666 ‘(The type of earth called *trtso*) is fit (to be used) as fields, whatever one
 12667 plants in it, (the planting) will be good (successful).’ (25-cWXCWz, 64)

12668 Although emphatic reduplication is highly productive and regular, a handful
 12669 of verbs have irregular reduplication patterns. The transitive verb *rvtçar* ‘tread
 12670 on’ has the emphatic form *rvtçumtçar* ‘trample’ (compare example 183, §18.8.2
 12671 with 180, §14.6.2) with *-um* reduplicated syllable (§19.4.2.2). The stative verb *mdi*
 12672 ‘be complete’ has the emphatic form *mdoømdi* with *-oø* reduplication (§19.4.2.2),
 12673 and *ts^hu* ‘be fat’ has the suffixed *-e* reduplicated form *ts^huts^he* ‘be very fat’.

12674 The verb *fse* ‘be like’ has the irregular reduplicated form *-fsr~fse* alongside *-*
 12675 *fsu~fse* in universal concessive conditionals (*tc^{hi} puu-nuu-fsr~fse* ‘in any case’, ex-
 12676 ample 33, §25.2.3.3).

³In (28), the subject of the verb *pe* ‘(it) is good’ is not the crop referred to by the interrogative pronoun *tc^{hi}*, but the planting activity. To analyze this example as a correlative, one would have to suppose that a complement clause such as *nunu kx-ji* ‘planting that’ has been elided before *pe* (on *pe* ‘be good’ as a complement-taking verb, see example 196 (§24.5.8)).

12677 13 Negation

12678 Negation in Japhug is mainly expressed by negative prefixes (§13.1). It is sym-
12679 metrical (Miestamo 2005): the presence of these prefixes is not systematically
12680 correlated with finiteness or TAME alternations.

12681 In addition to negative prefixes, a periphrastic negative construction with sentence-
12682 final negative auxiliary is also attested (§13.2), and it is required in particular to
12683 mark double negation (§13.3).

12684 13.1 Negative prefixes

12685 13.1.1 Allomorphy

12686 Four negative prefixes are found in Japhug: *mr-*, *mu-*, *ma-* and *múj-*. Their distri-
12687 bution is determined by TAME and finiteness.

12688 The *ma-* prefix is restricted to prohibitive verb forms (§21.4.3.1), and always
12689 combined with type A orientation preverbs (§15.1.1.1).

12690 The stress-bearing (§11.2.3) *múj-* prefix (see 1 below) is a portmanteau of nega-
12691 tion and Sensory evidential (§21.3.2). The Sensory prefix *nuu-* has the expected ne-
12692 gative form *mu-nuu-* only in the case of contracting verbs (§21.3.2.1). Otherwise,
12693 when the prefixal sequence *mu-nuu-* occurs, the *núu-* preverb marks the Imperfec-
12694 tive (§21.2.1).

12695 The form *mr-* is found on non-finite verbal forms without any orientation
12696 preverb (§16.1.1.2, §16.1.2.2, §16.2.1.2, §16.3.1), in Factual Non-Past and Irrealis form
12697 (see 3 above in §11.2.1), and also when preceded by the interrogative *w-* (§21.7.4.1)
12698 as in (1) and the Proximative *núu-* (§21.6.2) as in (2).

- 12699 (1) *tce tui-ŋke w-mr-ta-za, w-mr-nuu-munmu q^he*
LNK INF:II-walk QU-NEG-AOR:3→3'-start QU-NEG-AOR-move LNK
12700 *múj-sy-mto*
NEG:SENS-PROP-see
12701 'If it has not started walking, if it has not moved, it is not visible.'
12702 (26-NalitCaRmbWm)

13 Negation

- 12703 (2) *juſfcuar juw-my-c-tv-t^hu-t-a* zo
 yesterday PROXM-NEG-TRAL-AOR-ask-PST:TR-1SG EMPH
 12704 ‘Yesterday I almost did not go and ask about it.’ (elicited)

12705 The allomorph *mu-* is found elsewhere, including non-finite verb forms with
 12706 orientation preverbs (§16.1.1.2, §16.1.2.2, §16.2.1.6) and all finite verb forms with
 12707 orientation preverbs other than the Prohibitive and the verbal forms where slot
 12708 -6 is filled (Irrealis, Interrogative, Proximative etc).

12709 The partial reduplication (§12.4.1) of *mu-* (which occurs in particular in the
 12710 protasis of conditionals, §12.4.1.2) does not yield expected †*mu~mu-*, but rather
 12711 *mu~my-* with vowel alternation: compare for instance *mu-nuu-si* ‘she did not die’
 12712 with the *mu-* prefix (as expected in the Aorist) with *mu~my-nuu-si-a* ‘if I do not
 12713 die’ in (4).

- 12714 (3) *tx-mu nuu yuujpa kure myctşa muu-nuu-si*
 INDEF.POSS-mother DEM this.year DEM.LOC until NEG-AOR-die
 12715 ‘The old woman only died this year (did not die until this year).’
 12716 (14-siblings, 353)

- 12717 (4) *muu~my-nuu-si-a ny, a-tx-kui-nuulabrdap-a*
 COND~NEG-AOR-die-1SG ADD IRR-PFV-2→1-hit.with.forelegs-1SG
 12718 *ra*
 be.needed:FACT
 12719 ‘If (after that) I have not died (yet), hit me with your forelegs.’
 12720 (2003kAndzwsqhaj2, 83)

12721 The Interrogative *u-* prefix, like conditional reduplication, requires the *my-*
 12722 negative prefix (see 1 above), and this commonality in morphophonology is cor-
 12723 related with a similarity in function, since both the prefix *u-* and reduplication
 12724 are used to mark the verb of the protasis of conditional clauses (§25.2.1).

12725 The -6 slot *umy-* prefix of possible modality (§21.7.2) has a surface form iden-
 12726 tical to the combination of the interrogative *u-* with the negative prefix *my-*, as
 12727 in (5). The *umy-* synchronically differs from *u-my-* (from which it historically
 12728 derives) in that it can occur with the peg circumfix (§11.4, §21.7.2.1). It is not com-
 12729 patible with a negative prefix.

- 12730 (5) *qajuu kur-fse ra tu-ndze umy-ŋu ma*
 bug SBj:PCP-be.like PL IPFV-eat[III] PROB-be:FACT LNK
 12731 ‘It presumably/maybe eats bugs.’ (23-pGAYaR, 35)

12732 Negative prefixes are restricted to verb forms, and cannot be prefixed on nouns
 12733 (§13.4.1). They occur however on non-finite verb forms including participles (§16.1.1.2,
 12734 §16.1.2.2, §16.1.3.4), infinitives (§16.2.1.2, §16.2.1.6, §16.2.3.1), degree nominals (§16.3.1),
 12735 converbs (§16.6.1.2, §16.6.2), but not action nominals (§16.4) and fossilized deverbal nouns (§16.5).

12737 13.1.2 Suppletive negative verbs

12738 Negative prefixes can occur on most verbs, with the exception of copulas and
 12739 existential verbs, which have suppletive negative forms (§14.2.2), as illustrated
 12740 in Table 13.1.¹ The contrast between the neutral copula *ŋu* ‘be’ and the Emphatic
 12741 Affirmative *cti* ‘be’ is neutralized in the negative, where only one negative copula
 12742 *maꝝ* ‘not be’ is present (§22.5.1.1).

Table 13.1: Suppletive negative verbs

	Affirmative	Negative
Copula	<i>ŋu</i> ‘be’, <i>cti</i> ‘be’ (emphatic affirmative)	<i>maꝝ</i> ‘not be’
Existential	<i>tu</i> ‘exist’	<i>me</i> ‘not exist’
Sensory existential	<i>ŋŋzu</i> ‘exist’	<i>maje</i> ‘not exist’

12743 For instance, the negation of *ŋu* ‘be’ and *tu* ‘exist’ can only be *maꝝ* ‘not be’ (6)
 12744 and *me* ‘not exist’ (7).

- 12745 (6) *azō maꝝ-a*
 1SG not.be:FACT-1SG
 12746 ‘I am not (that girl).’ (2003sras, 66)

- 12747 (7) *kuicunguu tce tuitsʰot puu-me tce,*
 former.times LOC clocks PST.IPFV-not.exist LNK
 12748 ‘In former times, there were no clocks.’ (29-LAntshAm, 65)

12749 Combining *ŋu* and *tu* with negative prefixes (for instance †*maꝝ-ŋu-a* instead of
 12750 *maꝝ-a* ‘I am not/It is not me’ and †*maꝝ-puu-tu* instead of *puu-me*) is utterly incorrect

¹ Another verb lacking negative forms is *kṛtupa* ‘tell’, though for a different reason (§14.3.4).

13 Negation

and categorically rejected by all speakers. Likewise, negative copulas cannot take negative prefixes ($\dagger m\text{r}-ma\text{r}-a$ is ungrammatical).

It is however possible to combine affirmative copulas or existential verbs with their negative counterparts as postverbal periphrastic negations (§13.2). The copulas *ju* and *ma\text{r}* occur together in the phrase *ju ciny ma\text{r} kuu* ‘in any case it is not true’ (example 139, §9.1.6.4). The negative existential *me* ‘not.exist’ is very commonly found with the participle of its antonym *kui-tu* to express emphasis on the non-existence, as in (8) in comparison with (7) (§22.5.1.2).

(8) *kua\text{cun}\text{ygu} mk^hurlu kui-fse ra pui-kui-tu*

former.times machine SBJ:PCP-be.like PL PST.IPFV-SBJ:PCP-exist

me.

not.exist:FACT

‘In former times, there were no machines or things like that at all.’

(140430 tWflkur, 4)

13.1.3 Verbs requiring the negative prefixes

Some verbs are defective and lack affirmative forms: they only appear in conjunction with negative prefixes. Two categories can be distinguished.

First, a handful of defective verb roots are only attested with negative prefixes, listed in Table 13.2. The verb roots in this table are not found in any derived form without negation, except for *m\text{r}-xsi* ‘it is not known’, a highly defective verb (§14.3.4) historically related to the transitive verb *suz* ‘know’ (whose paradigm is not defective).

The complex collocation *NEG + spa = NEG + rka = tu/me* ‘be guilty/innocent’ contains a bipartite verb (§11.6.3) whose first component *-spa* may be related to the modal auxiliary *spa* ‘be able to’ (§19.3.1, §24.5.3.4) and whose second component *-rka* is an orphan verb.

Table 13.2: Verb roots requiring a negative prefix

Root	Verb	Factual Non-Past 3SG
<i>-zui</i>	<i>NEG + zui</i> ‘not just be’	<i>m\text{r}-zui</i>
<i>-t\text{c}^h\text{yz}</i>	<i>NEG + t\text{c}^h\text{yz}</i> ‘be contrary to religion’	<i>m\text{r}-t\text{c}^h\text{yz}</i>
<i>-rka</i>	<i>NEG + spa = NEG + rka = tu/me</i> ‘be guilty/innocent’	<i>m\text{r}-spe m\text{r}-rke me</i>
<i>-(x)si</i>	<i>NEG-xsi</i> ‘it is not known’	<i>m\text{r}-xsi</i>

12775 The verb *NEG + zuu* ‘not just be’, ‘not be/have only’ (9) is most commonly used
 12776 in one of the comparative constructions (§26.2.3) and has even been further gram-
 12777 maticalized as an adverb *myz̥uu* ‘even more’ (10).

- 12778 (9) *kʰyjmu nutcu my-zuu ma, tyrjjo tu tce,*
 kitchen DEM:LOC NEG-be.just LNK shelf exist:FACT LNK
 12779 ‘In the kitchen, there are not just (the aforementioned objects), there is
 12780 also a shelf (to store the cooking implements).’ (2011-11-kha2, 22)

- 12781 (10) *nunuu paš kuu tu-ndze tce, myz̥uu zo cʰui-tsʰu cʰa*
 DEM pig ERG IPFV-eat[III] LNK even.more EMPH IPFV-be.fat can:FACT
 12782 ‘When the pig eats it (acorns), it can grow even fatter.’ (08-CkrAz, 49)

12783 Second, most *suu-/z-* abilitative verbs (§19.3) are only found in negative forms.
 12784 For instance the abilitative *z-n̥yo* from *n̥yo* ‘wait’ only occurs with a negation in
 12785 the meaning ‘cannot wait to’ (due to hurry/impatience) as in (11).

- 12786 (11) *spjaŋkuu nuu kuu ju-z̥yuit muu-pjy-z-n̥yo zo tce,*
 wolf DEM ERG IPFV-arrive NEG-IFR.IPFV-ABIL-wait EMPH LNK
 12787 ‘The wolf could not wait (for the fox) to arrive.’ (140516 huli de baofu-zh,
 12788 43)

12789 This constraint is also observed with the lexicalized abilitative *spʰut* ‘can cut’
 12790 (from *pʰut* ‘cut, pluck’, §19.3.1) as in (12).

- 12791 (12) *tsantu kuu uu-ndzruu müj-spʰut ma*
 scissors ERG 3SG.POSS-nail NEG:SENS-can.cut LNK
 12792 *uu-tuu-rko uu-tuu-jas*
 3SG.POSS-NMLZ:DEG-be.hard 3SG.POSS-NMLZ:DEG-be.thick
 12793 *nuu-syre zo*
 SENS-be.ridiculous EMPH
 12794 ‘The scissors cannot cut through her nails, as they are extremely hard and
 12795 thick.’ (2012, heard in context)

12796 13.1.4 Lexicalized negation

12797 Some verb roots have negative forms with unpredictable lexicalized meanings.
 12798 Three subtypes can be distinguished.

12799 First, the negative form of the underived form of the root can have an extended
 12800 meaning. For instance, the verb *rkar* ‘be strong’, ‘be in good physical condition’
 12801 can mean ‘be pregnant’ in the negative as in (13).

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- 12802 (13) *ki tcʰeme ki muu-pṇr-rkan*
DEM.PROX girl DEM.PROX NEG-IFR-be.in.good.shape
12803 ‘This woman became pregnant.’ (elicited)

12804 Second, the special meaning of the negation appears in derivations: for in-
12805 stance, the stative verb *ftsʰi* ‘feel better’ has a negative causative *NEG+suftsʰi*
12806 ‘force’, ‘coerce’ (§17.2.3) and a lexicalized negative participle *mrkuftsʰi* ‘forcibly’
12807 used as an adverb (§16.2.1.8).

12808 Third, some lexicalized noun-verb collocations require a negative form (§22.4.1.5),
12809 for instance *tu-skʰruu=NEG-βdi* ‘be pregnant’ from *tu-skʰruu* ‘body’ and *βdi* ‘be
12810 well’ as in (14).

- 12811 (14) *ndzi-rzaβ bṇabna zo ndzi-skʰruu muu-pṇr-βdi*
3DU.POSS-wife both EMPH 3DU.POSS-body NEG-IFR-be.well
12812 ‘Both of their wives got pregnant.’ (2005 Lobzang, 2)

12813 13.2 Periphrastic negation

12814 Aside from negative prefixes (15a), negation can be expressed by the negative
12815 copula *maʂ* ‘not be’ (15b) and the negative existential verb *me* ‘not exist’ (15c) in
12816 postverbal position.

- 12817 (15) a. *muu-puu-mto-t-a*
NEG-AOR-see-PST:TR-1SG
12818 ‘I have not seen it.’ (several examples)
- b. *puu-mto-t-a maʂ*
AOR-see-PST:TR-1SG not.be:FACT
12819 ‘I have not seen it, (but rather...).’
- c. *puu-mto-t-a me*
AOR-see-PST:TR-1SG not.exist:FACT
12820 ‘I have seen none/I haven’t seen anything.’ (several examples)

12823 The negative copula *maʂ* ‘not be’ occurs postverbally in Periphrastic TAME
12824 categories requiring a copula (§21.2.2), or to express emphatic negation, contrast-
12825 ing with an assertative postverbal copula (§22.5.3.1) as in (16b).

- 12826 (16) a. *tcʰindža pui-tuu-yṛwu ḷu?*
why SENS-2-cry be:FACT
12827 ‘Why are you crying?’

- 12828 b. *pui-y̥wu-a mas ny, tur-mui pjui-lst*
 SENS-cry-1SG not.be:FACT SFP INDEF.POSS-sky IPFV-release
 12829 *pui-cti ma*
 SENS-be.AFF LNK
 12830 ‘It is not that I am crying, (I look like I am crying because) it has been
 12831 raining.’ (2005-stod-kunbzang, 391)

12832 The postverbal negative existential *me* (§22.5.1.2) has a universal negative mean-
 12833 ing ‘nothing’ or negative indefinite ‘none, not any’ as in (15c) (§22.5.4).

- 12834 (17) *tce uu-mdor tc^hi zo fse my-xsi,*
 LNK 3SG.POSS-colour what EMPH be.like:FACT NEG-GENR:know
 12835 *a-ky-ti me ma mu-pui-mto-t-a.*
 1SG.POSS-OBJ:PCP-say not.exist:FACT LNK NEG-AOR-see-PST:TR-1SG
 12836 *uu-ndzi kuny pui-mto-t-a me*
 3SG.POSS-skin also AOR-see-PST:TR-1SG not.exist:FACT
 12837 ‘I don’t know which colour it_i has, I can’t say because I have not seen it_i, I
 12838 have not even seen any of its_i hides.’ (27-kikakCi, 22)

12839 It is also found in one of the superlative constructions, illustrated by example
 12840 (18) (§26.4.3).

- 12841 (18) *βzui kui-fse tu-q^he-a me*
 mouse SBJ:PCP-be.like IPFV-hate[III]-1SG not.exist:FACT
 12842 ‘Mice is what I hate most (there is nothing that I hate like a mouse).’
 12843 (140427 bianfu yu huangshulang-zh, 13)

12844 13.3 Double negation

12845 Since negative prefixes are not recursive, there are only two ways to express
 12846 double negation in Japhug: either is by combining a negative verb form with a
 12847 negative auxiliary (*me* ‘not exist’ or *maje* ‘not exist’), or a negative verb form in
 12848 a complement clause with a negative complement-taking verb.

12849 Double negation with existential verbs can indicate universal quantification,
 12850 in particular when the verb taking the negative prefix is transitive (or semi-
 12851 transitive) and no overt object (or semi-object) is present as in (19) (see also
 12852 §22.5.4).

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- 12853 (19) *pas ayayli* *ma rcanuu* *mr-ndze* *zo*
 pig produce.a.lot.of.manure:FACT LNK UNEXP:FOC NEG-eat[III] EMPH
 12854 *me*
 not.exist:FACT
 12855 ‘Pigs produce a lot of manure, as they eat everything (there is nothing
 12856 they don’t eat).’ (05-paR, 28)

12857 Negative participial forms with a negative auxiliary express mild assertion, as in
 12858 (20) and (21).

- 12859 (20) *azury* *mr-kui-pe* *me*
 1SG:GEN NEG-SBJ:PCP-be.good not.exist:FACT
 12860 ‘I am fine (I don’t have any particular problem).’ (140506 shizi he
 12861 huichang de bailingniao-zh, 73)
- 12862 (21) *mr-kui-k^hu* *me*
 NEG-SBJ:PCP-be.possible not.exist:FACT
 12863 ‘There is nothing wrong with it.’ (common in metalinguistic judgments
 12864 about the grammaticality of sentences)

12865 Another type of double negation construction is observed when both the com-
 12866 plement-taking verb and the verb in the complement clause take a negative prefix.
 12867 The most common verb in this type of configuration is the modal verb *k^hu* ‘be
 12868 possible’ (§24.5.3.1), either with finite complements (§24.2.3) as in (22), or with
 12869 negative infinitival complements (example 146, §16.2.1.2), expressing the meaning
 12870 ‘have no choice but to X’.

- 12871 (22) *ny-rca* *mr-yi-a* *mr-k^hu* *q^he*
 2SG.POSS-together.with NEG-come:FACT-1SG NEG-be.possible:FACT LNK
 12872 ‘It have no other choice but to go with you/follow you.’ (Nyima Wodzer
 12873 2003.2, 94-95)

12874 Other verbs attested in this type of construction include *nyz* ‘dare’ (§24.5.3.5)
 12875 as in (23) and *c^ha* ‘can’ (with the meaning ‘cannot help but’ as in 241, §15.2.10.4).

- 12876 (23) *rjylpu fka cti* *tce*, *mr-ky-yi* *mr-nyz-i* *ri*
 king order be.AFF:FACT LNK NEG-INF-come NEG-dare:FACT-1PL LNK
 12877 ‘It is the king’s order, we do not dare not to come.’ (Norbzang 2005, 400)

13.4 Negation and parts of speech other than verbs

Verbs are the only part of speech than can take negative prefixes. This section describes the constructions used in Japhug to express meaning corresponding to that of negative nouns or pronouns, and also discusses negative intensifiers adverbs.

13.4.1 Nouns

Although there is a privative nominal derivation in Japhug (§5.7.1), there is no way of building a negative noun like English ‘non-*X*’ or ‘un-*X*’ meaning ‘which is not *X*’ (rather than *X*-less). The only way to express such a meaning is build using a participial relative (§16.1.1) with the negative copula *X kuu-maꝝ* ‘something/someone who/that is not *X*’ (§22.5.1.1), for instance *tx-r̥it kuu-maꝝ* ‘someone who is not a child’ in (24).

- (24) *uzora nui-r̥it zo cʰui-βri-nui qʰe kuimaaꝝ ra*
 3PL 3PL.POSS-offspring EMPH IPFV-protect-PL LNK other PL
nui-r̥it nui puupuŋjuny [tx-r̥it kuu-maꝝ]
 3PL.POSS-offspring DEM TOP INDEF.POSS-child SBJ:PCP-not.be
tú-wy-suapa qʰe
 IMPF-INV-consider LNK
 ‘(At school, some parents) protect their own children, and as for the
 children of other people, they consider them as if they were not children
 (‘as non-children’).’ (140501 01, 59)

13.4.2 Pronouns

Japhug lacks negative pronouns (§6.6), and headless relative clauses (§23.7) combined with a negative existential copula (§13.1.2) are used to express the meanings ‘nothing’, ‘nobody’ (25, 27) or ‘nowhere’ (26).

- (25) *ny-kuu-caꝝ me*
 2SG.POSS-SBJ:PCP-catch.up not.exist:FACT
 ‘Nobody will (be able) to catchup with you.’ (2003 qachGa, 109)
- (26) *tumurkʰa tce u-sv-r̥ngw̥ maye*
 evening LOC 3SG.POSS-OBL:PCP-lie.down not.exist:SENS
 ‘In the evening, it has no place to stay.’ (26-NalitCaRmbWm, 38)

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12904 In negative existential constructions, the headless relative can also mean ‘not
12905 any of’ as *kṛ-mto* ‘any (amadou) to be seen’ in (27).

- 12906 (27) *jinde tce nui [u-kui-ntc^hoz] mage q^he, [kṛ-mto]*
nowadays LNK DEM 3SG.POSS-SBJ:PCP-use not.exist:SENS LNK OBJ:PCP-see
12907 *kuny mage*
also not.exist:SENS
12908 ‘Nowadays **nobody** uses (amadou), there isn’t even any to be seen.’
12909 (15-babW, 232)

12910 13.4.3 Adverbs

12911 Japhug lacks an all-purpose negative adverb, but there a few negative intensifiers.

12912 The adverb *maka* is generally used with negative verb forms to express em-
12913 phatic negation ‘not ... at all’ as in (28), in particular with negative existential
12914 verbs (§22.5.4).

- 12915 (28) *tc^heme k^hṛck^hyr ku-kui-ce maka*
girl man.seating.place IPFV:EAST-GENR:S/O-go at.all
12916 *mu-i-pur-jiy*
NEG-PST.IPFV-be.allowed
12917 ‘Ladies were not allowed to go to the men’s seating place.’ (31-khAjmu,
12918 39)

12919 It is however attested in non-negative sentences as in (29), in adversative con-
12920 texts.

- 12921 (29) *jxxts^{hi} ndyre maka nui-nycqe ra*
this.time ADVERS at.all IMP-endure[III] be.needed:FACT
12922 ‘This time (unlike the previous times), you have absolutely to bear (the
12923 cold of the moon and the heat of the sun without making a word,
12924 otherwise we will not succeed).’ (tWxtsa, 211)

12925 This adverb is built from the root *-ka* found in the distributive determiner *tuka*
12926 ‘each’ (§9.1.3.3) and the distributive pronoun *zaka* ‘each his own’ (§6.7.3). The
12927 first syllable *ma-* resembles the negative prefix *mṛ-* (§13.1), but given the fact that
12928 negative prefixes (§13.1) are strictly restricted to verb forms, it is not likely that
12929 the first syllable of *maka* is from a negative prefix.

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12930 Rather, it is from the intensifier *mu*,² also attested as intensifier ‘not... at all’ in
12931 negative contexts (30), in *status constructus* form *my-* (§5.4.1), followed by vowel
12932 assimilation with the following syllable -ka.

- 12933 (30) *nua ma kui-ra mu zo me*
DEM apart.from SBJ:PCP-be.needed at.all EMPH not.exist:FACT
12934 ‘I don’t need anything else at all.’ (2003 tWxtsa, 121)

12935 We find in addition the compound form *mucin* ‘not even one at all’ (31) from
12936 *mu* and *ciny* ‘(not) even one’ (§9.1.6.4).

- 12937 (31) *kuumdz ra mucin zo my-arcyt-tci*
relative PL at.all EMPH NEG-have.a.kinship.relationship:FACT-1DU
12938 ‘We don’t have any kinship relationship at all.’ (12-BzaNsa, 57)

²This form is related to the denominational verb *mymu* ‘be the most important’.

12939 14 Person indexation and argument 12940 structure

12941 14.1 Introduction

12942 In Japhug, person indexation is the defining feature of finite verbs, as opposed to
12943 non-finite verbs (§16) and other parts of speech. Japhug finite verb forms index
12944 one or two arguments, depending on the transitivity of the verb, using a combi-
12945 nation of prefixes, suffixes and stem alternation. No verb indexes more than two
12946 arguments. The indexation system is very close to a canonical direct-inverse sys-
12947 tem (§14.3.2.8).

12948 This chapter first presents intransitive and transitive conjugations, investi-
12949 gates the issue of agreement mismatch, and then discusses the origin of person
12950 indexation affixes. In addition, it documents the analogical extension of person
12951 indexation suffixes to non-finite verb forms in some specific contexts.

12952 14.2 Intransitive verbs

12953 Intransitive verbs comprise dynamic, stative and semi-transitive verbs. All of the
12954 verbs have in common the property of indexing one argument, the intransitive
12955 subject, which when overt is in absolute form (§8.1.1).

12956 14.2.1 The intransitive paradigm

12957 Table 14.1 illustrates the paradigm of intransitive verbs in Kamnyu Japhug, using
12958 the verb *ce* ‘go’ in the Factual non-past¹ as an example. Other Japhug dialects
12959 have slightly different indexation suffixes, a question discussed in §14.8.1 with
12960 comparative evidence from other Gyalrong languages.

¹This TAM category is chosen to illustrate the paradigms due to the fact that it does not bear any orientation preverb, but at the same time presents stem alternation in the transitive paradigm.

12961 There is no stem alternation related to person indexation in the intransitive pa-
 12962 radigm in any Japhug dialect. The invariable stem is represented with the symbol
 12963 Σ in Table 14.1.²

Table 14.1: The intransitive conjugation in Japhug

Person	Form	ce ‘go’ (Factual non-past)
1SG	$\Sigma-a$	$\text{ce-}a$
1DU	$\Sigma-t\zeta i$	$\text{ce-}t\zeta i$
1PL	$\Sigma-ji$	$\text{ce-}j$
2SG	$tuu-\Sigma$	$tuu-\text{ce}$
2DU	$tuu-\Sigma-ndzi$	$tuu-\text{ce-}ndzi$
2PL	$tuu-\Sigma-nuu$	$tuu-\text{ce-}nuu$
3SG	Σ	ce
3DU	$\Sigma-ndzi$	$\text{ce-}ndzi$
3PL	$\Sigma-nuu$	$\text{ce-}nuu$
generic	$kuu-\Sigma$	$kuu-\text{ce}$

12964 With a few well-identified exceptions, the indexation suffixes agree in person
 12965 and number with the intransitive subject in Japhug. There is no indexation with
 12966 possessors or oblique arguments, unlike closely related languages like Khros-
 12967 kyabs (Lai 2015) or Tangut (Jacques 2016e).

12968 In the intransitive paradigm, five suffixes and two prefixes are found. The
 12969 stress is always on the last syllable of the verb stem (§11.3, except in a handful
 12970 of forms, §3.7), and all person indexation suffixes, including $-a$, are unstressed
 12971 and sometimes are even devoiced (§3.7). Unlike other languages of the Trans-
 12972 Himalayan, such as Khaling (where the dual inclusive and the third dual are
 12973 homophonous, see Jacques et al. 2012: 1113), in Japhug all slots in the intransitive
 12974 paradigm are distinct, without ambiguity.

14.2.1.1 First person

12975 First person subjects are indexed by a set of three suffixes marking both person
 12976 and number: $-a$, $-t\zeta i$ and $-ji$ for first singular, dual and plural, respectively. As
 12977 in the pronominal paradigms (§6.1), there is no inclusive/exclusive distinction
 12978 in Japhug; inclusive first+second person is indexed as 1DU or 1PL, as shown by

²This notation follows the Kirantological tradition (for instance van Driem 1993a).

examples such as (1) where the 1DU indexation corresponds to the sum of the 2SG and 1SG pronouns in the phrase *nŋzo cʰo aŋo ni*. Equivalent examples with exclusive meaning (1SG+3SG) can be found in the corpus, for instance (23) below in §14.2.6.³

- (1) *nŋzo cʰo aŋo ni, nŋki, rŋymtsʰu ur-taŋ nuŋtu χsui-sŋi*
 2SG COMIT 1SG DU FILLER sea 3SG.POSS-on DEM:LOC three-day
cui-nŋbaŋ-tci, cui-nŋmŋole-tci.
 TRAL-have.a.good.time:FACT-1DU TRAL-do.sightseeing:FACT-1DU
 ‘You and I will go on a three day tour on the sea.’ (150827
 mengjiangnv-zh, 216)

The 1SG *-a* suffix is the only suffix in Japhug with a vowel other than *u* (or *i* after palatal and alveolo-palatal consonants, §3.5.2), and is the only indexation suffix that can be followed by another indexation suffix in the transitive paradigm (§14.3.2.6). The *-a* 1SG person index is among the suffixes revealing the underlying form of the codas: *-β*, *-γ*, *-β̄*, *-z*, which become unvoiced in some contexts (§3.2.2) are realized as voiced (see for instance in Table 14.2 below; *-β* is realized [-w-] in this context, since it becomes an onset, §3.2.1), but the coda *-t* remains unvoiced (for instance *scit-a* be.happy-1SG ‘I am happy’). The codas are resyllabified; for instance *scit-a* is syllabified as *sci/tə*.

Some verb stems (independently of transitivity) undergo predictable phonological alterations when followed by *-a*. With verb stems whose last syllable is an open syllable, the *-a* suffix merges its vowel. With closed syllable verb stem in *-vC* (*C* representing a coda), the 1SG suffix causes vowel assimilation. These phonological rules are presented in Table 14.2.

When the verb stem ends in *-a*, the 1SG suffix merges with the stem as [a] in Kamnyu Japhug, resulting in homophony between the 1SG and the 3SG forms. The surface form [rga] corresponds to both 1SG *rga-a* ‘I like it’ and 3SG *rga* ‘he likes it’. The fused and invisible suffix is systematically indicated in the orthography used in this grammar. In the Sarndzu of Japhug, a long vowel occurs in the 1SG, which thus remains different from the 3SG.

When the verb stem ends in vowels other than *-a*, these vowels undergo synizesis with the *-a* suffix (§3.3.1.3), merging into one syllable. In addition, the mid-high vowels *-e* and *-o* become the corresponding high vowels *-i* and *-u* in this context.

These vowel mergers are obligatory in the Kamnyu dialect. However, there are not attested in all Japhug dialects, which may favor hiatus.

³In the transitive paradigm, the inclusive/exclusive distinction is not present either, but note the case of inclusive semi-reflexive configurations (§14.3.2.4).

With verb stem ending in $-yt$, $-yn$, $-y\beta$, $-ym$, $-yr$, $-yl$ and $-yz$, the 1SG suffix causes non-optimal vowel assimilation $-yC-a \Rightarrow /-aCa/$ (§3.3.1.2). Table 14.2 provides examples for all rhymes of this type. In the orthography employed in this grammar, these forms are transcribed as $aC-a$ rather than the underlying $yC-a$ ($jyat-a$ rather than $jy\text{yt}-a$), to indicate the fact that $y \Rightarrow a$ assimilation is obligatory in this context.

Table 14.2: Predictable phonological alternations on the verb stem caused by the -a 1SG suffix in Kamnyu Japhug

Rhyme of the last syllable of the verb stem	Result of fusion with the 1SG suffix	Examples
-e	[-ia]	$\text{ce}-a \Rightarrow [\text{cia}]$ ‘I will go there’
-o	[-ua]	$tso-a \Rightarrow [\text{tsua}]$ ‘I understand it’
-a	[-a]	$rga-a \Rightarrow [\text{rga}]$ ‘I like it’
$-y\beta$	[-awa]	$t^h u-rdy\beta-a \Rightarrow [t^h \text{urdáwa}]$ ‘I lost money’
$-ym$	[-ama]	$mts^h ym-a \Rightarrow [mts^h \text{áma}]$ ‘I hear it’
$-yt$	[-ata]	$jy\text{yt}-a \Rightarrow [\text{jyáta}]$ ‘I will come back’
$-yn$	[-ana]	$tu-nusmyn-a \Rightarrow [\text{tunusmána}]$ ‘I will treat it’
$-yr$	[-ara]	$pui-at\text{yr}-a \Rightarrow [\text{patára}]$ ‘I fell down’
$-yl$	[-ala]	$nu-nutufçyl-a \Rightarrow [\text{nuñutufçála}]$ ‘I had diarrhea’
$-yz$	[-aza]	$mk^h yz-a \Rightarrow [\text{mk}^h \text{áza}]$ ‘I am expert at it’

The first dual $-t\dot{\text{ci}}$ suffix ($-tsə$ in some dialects of Japhug, §14.8.1) only causes regular devoicing assimilation on the coda of the verb stem: $-z$, $-r$, $-y$, $-s$ are realized as $-s$, $-g$, $-x$, $-χ$ when followed by $-t\dot{\text{ci}}$ (for instance $mk^h yz-t\dot{\text{ci}}$ is pronounced [mk^héstçi]). The labial coda $-β$ is not affected.

The first plural $-ji$ has two allomorphs, $-j$ and $-i$. The first one occurs on verb stems ending in open syllables, for instance $\text{ce}-j$ ‘we (will) go’, and the second follows verb stems in closed syllables, such as $scit-i$ ‘we are happy’, with resyllabification of the coda (sci/ti). Like the $-a$ suffix discussed above, the suffix $-i$ reveals the underlying form of the codas. The contrast between $-u$ and $-i$ is neutralized as [i] when followed by the 1PL suffix: for instance, the last syllable of $smi t^h u-\betalu-j$ ‘we made a fire’ and $l\text{sy}puj pu-\betali-j$ ‘we planted radish’ is considered to be homophonous (the last syllable is realized as [βlij]) by Tshendzin (§3.3.2).

13031 **14.2.1.2 Non-first person**

13032 Second and third person forms have the same set of suffixes (zero, -ndzi and -nu
 13033 for singular, dual and plural, respectively) and only differ by the presence of a
 13034 *tu-* prefix in second person forms. Unlike in Situ (Lín 1993: 197–208), there is no
 13035 second person suffix in the 2SG.

13036 The non-first person dual and plural suffixes -ndzi and -nu (some Japhug di-
 13037 alects have -ndzə in the dual instead, see §14.8.1) nasalize the coda -t to [n], which
 13038 is not audible before -ndzi and results in a geminate in the plural. For instance,
 13039 *scit-ndzi* and *scit-nu* are realized as [scíndzi] and [scínnw], respectively. The vowel
 13040 -i and -u is often elided, resulting in apparent -n codas. The contrast between
 13041 the codas -n and -t is neutralized in these forms: the last two syllables of both *tu-*
 13042 *nvndut-nu* IPFV-fight-PL ‘they fight (over it)’ and *pju-ndun-nu* IPFV-read-PL ‘they
 13043 read/recite it’ are thus realized as [-ndúnnw].

13044 The second person *tu-* prefix fuses with the initial *a-* of contracting verbs
 13045 (§12.3). The result of vowel fusion is *tu-a-* ⇒ [ta] in the Factual Non-past (*tu-atv̥r*
 13046 ‘you will fall down’) or the Aorist (*jv-tu-ari* ‘you went there’), but *tu-v̥-* ⇒ [tv̥]
 13047 in Irrealis, Imperative, Imperfective or Prohibitive (*ma-tv̥-tu-v̥q̥e* ‘don’t cough’)
 13048 forms. Some irregular verbs have unpredictable second person forms (§14.2.2).
 13049 The generic intransitive subject prefix *kv-* (also used for the object of transitive
 13050 verbs, see §14.3.2.5) follows the same rules of vowel fusion as the second person
 13051 prefix.

13052 **14.2.2 Irregular intransitive verbs**

13053 In comparison with Zbu (Gong 2018), Japhug only has very few irregular verbs.
 13054 Irregularities related to person marking in Japhug all involve the prefixes.

13055 The second person forms of Sensory Evidential existential verbs *yvzu* ‘exist’
 13056 and *maje* ‘not exist’ (§21.3.2.1) are infixated rather than prefixed. The infixated forms
 13057 are *yvtyzu* and *mataje*, as in (2) (from Jacques 2012a: 91) and (3). These two verbs
 13058 lack non-finite morphology (§16.7) and do not occur in other tenses (§15.1.1.5) and
 13059 can be considered to be suppletive forms of the existential verbs *tu* ‘exist’ and *me*
 13060 ‘not exist’ (§13.1.2).

- 13061 (2) *icq^ha turme ra nu-rca yv<tv>z*
 13062 the.aforementioned person PL 3PL.POSS-following <2sg>exist:SENS
 13063 ‘(I saw) you among these people.’ (elicited)

- 13063 (3) *ky-mts^hym maka ma<ta>ŋe tce, ny-kw-mŋym*
 INF-hear at.all <2SG>not.exist:SENS LNK 2SG.POSS-SBJ:PCP-hurt
 13064 *tu uŋbrŋ-ŋu ma, mx-kw-pe tu*
 exist:FACT RH.Q-be:FACT SFP NEG-SBJ:PCP-be.good:FACT exist:FACT
 13065 *uŋbrŋ-ŋu ma nura nu-suso-t-a.*
 RH.Q-be:FACT SFP DEM:PL AOR-think-PST:TR-1SG
 13066 ‘(I) have not heard at all about you (for some time), I was wondering
 13067 whether you have some disease, whether something bad happened to
 13068 you.’ (phone conversation, 16-12-28)

13069 These are not the only infix forms in the paradigm of these verbs: the generic
 13070 person *ku-* is also infixated (*ŋyŋkryzu, makaje*) as is the autive *nu-* (§11.2.1).

13071 The verb *zyut* ‘reach, arrive’ has in part of its paradigm forms that are identical
 13072 to those of contracting verbs (§12.3). In the Aorist, it has two alternative second
 13073 person forms in free variation, the regular *jx-tu-zyut* and the form *jx-tu-azyut*
 13074 with an additional *a-*, illustrated by (5) and (4), coming from two versions of the
 13075 same story by the same speaker.

- 13076 (4) *a-rkut muu-jx-tuu-azyut myctša muu-puu-ta-mts^hym tce*
 1SG.POSS-side NEG-AOR-2-arrive until NEG-AOR-1→2-hear LNK
 13077 ‘I did not feel your (presence) until you arrived near me.’ (2012 Norbzang,
 13078 260)
- 13079 (5) *jx-tu-zyut tce, nyki, azo a-k^ha a-jx-tu-z-mvke*
 AOR-2-arrive LNK FILLER 1SG 1SG.POSS-house IRR-PFV-2-CAUS-be.first[III]
 13080 *ma nxj nx-k^ha a-mx-jx-tu-z-mvke ra*
 LNK 2SG 2SG.POSS-house IRR-NEG-PFV-2-CAUS-be.first[III] be.needed:FACT
 13081 *muu-tx-tuu-tut*
 NEG-AOR-2-say[III]
 13082 ‘You did not say “When you arrive, don’t go first to your house, come to
 13083 my house first.” (2005 Norbzang, 261)

13084 The paradigm of this verb otherwise includes non-optional contracting (*jx-*
 13085 *azyut* ‘he arrived’) and non-contracting forms (the immediate converb *ju-tu-zyut*
 13086 ‘as soon as X arrived’, §16.6.3).

13087 14.2.3 Semi-transitive verbs

13088 Semi-transitive verbs have the same paradigm as plain intransitive verbs, and
 13089 lack the morphological properties of transitive verbs (§14.3.1). Their intransitive

13090 subject is in absolute form. However, they take a semi-object (§8.1.5), also in ab-
 13091 solutive form, as *paxci* ‘apple’ in (6). These semi-objects do present some objectal
 13092 properties (§8.1.5, §23.5.4.1).

- 13093 (6) *tce azo t^ham kuiki, paxci ci tr-aro-a tce tcendyre, [...]*
 LNK 1SG now DEM.PROX apple INDEF AOR-have-1SG LNK LNK
 13094 *nuzora kumy ta-sui-ybe-nu* *ra*
 2PL also 1→2-CAUS-be.needed.eat:FACT-PL be.needed:FACT
 13095 ‘Now that I have (was given) this apple, I will give it to you also to eat.’
 13096 (150904 zhongli-zh, 35)

13097 Unlike transitive verbs, which can index the number of the object if the subject
 13098 is 1SG (§14.3.2.6), semi-transitive verbs cannot add a person index after the 1SG -a.
 13099 For instance, in (7), although the object is plural, a form such as *taroa-a-nuu* with
 13100 the -nu plural prefix is strictly prohibited.

- 13101 (7) *azo ty-rjit* *χsum aro-a*
 I INDEF.POSS-child three have:FACT-1SG
 13102 ‘I have three children.’ (elicited)

13103 The subject of some semi-transitive verbs, in particular *tso* ‘know, understand’
 13104 and *zyypa* ‘pretend’, can optionally be marked with the ergative like a transitive
 13105 subject (§8.2.2.3), as *ty-mu nuu kuu* in (8) and *βda^hmu nuu kuu* in (9).

- 13106 (8) *tcendyre [ty-mu nuu kuu] cur nyu nuu maka*
 LNK INDEF.POSS-mother DEM ERG who be:FACT DEM at.all
 13107 *muu-pjx-tso tceri*
 NEG-IFR.IPFV-know LNK
 13108 ‘The old woman did not realize who it was.’ (2002 qaCpa, 242)

- 13109 (9) *icq^ha βda^hmu nuu kuu [wuma zo ui-sum*
 the.aforementioned lady DEM ERG really EMPH 3SG.POSS-mind
 13110 *kuu-snaj to-zyypa*
 SBJ:PCP-be.good IFR-pretend
 13111 ‘The lady pretended to be a good person.’ (140520 ye tiane-zh, 44)

13112 Some semi-transitive verbs can take both nominal semi-object and comple-
 13113 ment clauses. For instance, *tso* (which can be translated as ‘know’, ‘understand’
 13114 or ‘realize’ depending on the context) occurs with nouns referring to speech or
 13115 meaning as semi-object (as in 10), finite relative clauses (11) and also participial
 13116 clauses (12, §24.5.4.2).

- 13117 (10) *pja muandzamuχtcury nuu-skyst a-puu-tuu-tso smaulym*
 bird all.kinds 3PL.POSS-speech IRR-IPFV-2-understand prayer
 13118 ‘May you understand the speech of all species of birds!’
 13119 (2003kandZislama, 85)
- 13120 (11) *ci ky-pa-tci, nuust^huci ty-nyrzab ri, [nuust^huci ny-ku*
 one AOR-do-1DU so.much AOR-pass(time) LNK so.much 2SG.POSS-head
 13121 *zru rcanua] muu-ky-tso-a*
 be.strong:FACT UNEXP:DEG NEG-AOR-know-1SG
 13122 ‘So much time has passed since we have married, I did not realize that
 13123 your hair was so long.’ (2003 Kunbzang, 467)
- 13124 (12) *tce [tc^hi uu-skyst kuu-γu ra] ku-tso-a*
 LNK what 3SG.POSS-speech SBJ:PCP-be PL IPFV-understand-1SG
 13125 *nuu-ra ma tu-tuu-ti stuasti, máj-cuiftaab-a nuu-ti*
 SENS-be.needed LNK IPFV-2-say alone NEG:SENS-remember-1SG SENS-say
 13126 ‘He says: ‘I need to understand what it is about (what objects these words
 13127 refer to), otherwise if you only speak (if you only explain orally) I won’t
 13128 remember.’ (conversation 14-05-10, 79)

13129 Among semi-transitive verbs, we find the following subclasses:

- 13130 • Verbs of cognition and perception: *tso* ‘understand’, ‘know’ *sryo* ‘listen’
- 13131 • Verbs of evaluation: *rga* ‘like’, *stu* ‘believe’, *duy* ‘have enough of’
- 13132 • Modal verbs: *c^ha* ‘can’
- 13133 • Verbs of possession: *aro* ‘own’
- 13134 • Copulas: *γu* ‘be’, *maχ* ‘not be’, *apa* ‘become’ (§22.5.1.1)
- 13135 • Verbs of assignation: *rmi* ‘be called’, *artsi* ‘count as’, *fse* ‘be like’
- 13136 • Verbs requiring an argument expressing time: *ac^hyt* ‘have X years of differ-
 13137 ence’, *tsu* ‘pass X time’
- 13138 • Verbs of pretence: *zyypa* ‘pretend’
- 13139 • Verbs of obtaining (§15.1.5.6): *aue* ‘have to eat/drink’, *βjyt* ‘get, obtain’
- 13140 • Some adjectival stative verbs: *mk^hyz* ‘be expert’, *p^hyn* ‘be efficient’

13141 The Tshobdun verbs *cʰv* ‘can, be able’ and *rge* ‘like’, cognates of the Japhug
 13142 semi-transitive verbs *cʰa* ‘can’ and *rga* ‘like’, are fully transitive, as shown by the
 13143 forms *mv-koy-cʰv-aŋ* (NEG-2→1-can-1SG) ‘you cannot (kill) me’ (Sun & Blogros
 2019: 634) and *ne-tv-rge* (IPFV-1→2-like) ‘I love you’ (Sun & Blogros 2019: 674),
 13144 which occur with local portmanteau prefixes (§14.3.2.3).

13145 Most semi-transitive verbs are underived bare roots. The only obviously de-
 13146 rived verbs are *zypa* ‘pretend’, which comes from the reflexive of the verb *pa*
 13147 ‘do’ (§18.3.3) and *artsi* ‘count as’, passive of *rtsi* ‘count’. The verb *aro* ‘own’ is
 13148 possibly analyzable as a denominal verb historically derived from *tr-ro* ‘excess’,
 13149 ‘surplus’, ‘leftover’ (§16.4.6, §20.2.1).

13150 Most semi-transitive verbs do not usually take a human semi-object, so that
 13151 sentences with a first or second person semi-object are generally clumsy to build.
 13152 For some of the verbs above, applicative forms are used when a first or second
 13153 person object is needed, for instance *nurga* ‘like’ and *nrstu* ‘believe’ (§17.4.1). The
 13154 verbs *stu* ‘believe’ and *nrstu* ‘believe’ differ in that the semi-object of the former
 13155 refers to words (in general, a complement clause; ‘believe that X’) while the object
 13156 of the latter is a person (‘believe him’).

13157 However, examples with subjects and semi-objects both either first or second
 13158 person are attested. For instance, (13) shows a very spontaneous use of a 2SG
 13159 semi-object with a 1SG subject with the verb *fse* ‘be like’. Only the subject is in-
 13160 dexed (with the suffix *-a*) and the use of the transitive *ta-* 1→2 portmanteau prefix
 13161 (§14.3.2.3) here would be nonsensical.

- 13162 (13) *a-bi, nyzo w-nur-fse-a?*
 13163 1SG.POSS-younger.sibling 2SG QU-SENS-be.like-1SG
 13164 ‘Sister, do I look like you?’ (2014-kWLAG, 475)

13165 The same is observed with the copulas *yu* ‘be’, *mar* ‘not be’ and also *apa* ‘be-
 13166 come’ as in (14) and (15). (see also §22.5.1.1) The copulas always index the subject,
 13167 never the semi-object, independently of any person hierarchy (see 66 in §14.3.2.8
 13168 below), and cannot take the *ta-* 1→2 and *kua-* 2→1 portmanteau prefixes.

- 13169 (14) *nyzo nui-apa-a*
 13170 2SG AOR-become-1SG
 ‘I became you.’ (elicited)
- 13171 (15) *azo nui-tuu-apa*
 13172 1SG AOR-2-become
 ‘You became me.’ (elicited)

Some semi-transitive verbs are labile; some have a transitive counterpart, while others have a plain intransitive one (§14.5.3). The meaning of the verb also slightly changes depending on transitivity (for instance, *rga* means ‘like’ when semi-transitive, and ‘be happy’ when stative intransitive).

The antipassive form of secundative verbs (§14.4.2.2), such as *r̥mbi* ‘give to someone’ have a status intermediate between semi-transitive and monotransitive verbs: they lack most transitive features (§14.3.1), but can index first and second person objects (§14.4.2, §18.6.4).

14.2.4 Intransitive verbs with oblique arguments

Semi-transitive verbs have to be distinguished from motion verbs (or perception verbs) with a goal (§8.1.8), such as *ce* ‘go’, *yi* ‘come’ or *ru* ‘look at’. These verbs are morphologically intransitive, lacking the morphological characteristics of transitive verbs (§14.3.1).

With these verbs, the goal can occur in absolute form, and superficially resembles a semi-object, as *sun̥guu* ‘forest’ in (16). Indexation obligatorily occurs with the subject (for example, the 3DU form in 16), never with the goal. As in the case of semi-transitive verbs, number stacking on the 1SG -*a* is not possible (§14.2.3, example 7).

- (16) *vnuz ni, [sun̥guu] jo-ce-ndzi.*
 two DU forest IFR-go-DU
 ‘Two (men) went into the forest.’ (26-tAGe, 1)

However, unlike semi-objects, these goals can optionally take locative postpositions, such as *z̥uu* in (17).

- (17) *tr-pytso n̥unu li [sun̥guu z̥uu] jo-ce.*
 INDEF.POSS-child DEM again forest LOC IFR-go
 ‘The child went again into the forest.’ (140428 yonggan de xiaocafen-zh, 232)

Dative marking on the goals is also well-attested, as in (18) – with motion verbs, it translates as ‘towards X’.

- (18) *tchemypu n̥u kui u-wa c̥o u-pi nura*
 girl DEM ERG 3SG.POSS-father COMIT 3SG.POSS-elder.sibling DEM:PL
p̥y-βde tce, sun̥guu u-cki tce jo-ce.
 IFR-leave LNK forest 3SG.POSS-DAT LOC IFR-go
 ‘The girl left her father and her brothers, and went toward the forest.’
 (140506 shizi he huichang de bailingniao, 76)

13204 The subject of intransitive verbs with goals is in absolute form, except when
 13205 shared with a transitive verb in another clause, as *tçʰemṛpuu nu kuu* in (18), which
 13206 owes its ergative marking to the transitive verb *jv-βde* ‘She left them’. The verb
 13207 *rpu* ‘bump into’ (which takes as goal the surface of physical contact) however can
 13208 take ergative subjects, as it is labile and can be conjugated transitively (§14.5.2).
 13209 Transitive verbs of manipulation can optionally take goals that are formally si-
 13210 milar to those of *ce* ‘go’ and *yi* ‘come’ (§14.5.4).

13211 Some intransitive verbs of speech, *ruqm̩i* ‘speak’ and *akʰu* ‘call’, can optionally
 13212 take a dative argument, as in (19).

- 13213 (19) *turme u-cki tu-ruqm̩i-a eti wo*
 person 3SG.POSS-DAT IPFV-speak-1SG be.AFF:FACT SFP
 13214 ‘I am talking to someone (else).’ (phone conversation, 2013-12-02)

13215 Other than locative and dative, some intransitive verbs select oblique argu-
 13216 ments with the genitive (§8.2.3) the relator noun *u-tar* ‘on’ (§8.3.4.3) and verbs
 13217 with intrinsically non-singular subjects often occur with comitative postposi-
 13218 tional phrases in *cʰo* (§14.2.6).

13219 Some intransitive verbs which cannot take semi-objects do occur with counted
 13220 nouns (in particular, *ruqm̩i* ‘speak’); these counted nouns however have scope
 13221 over the whole sentence, and are not arguments of these verbs, as argued in
 13222 §7.3.2.5.

14.2.5 Semi-transitive verbs with additional oblique arguments

13224 Some semi-transitive verbs can have up to three arguments, and are therefore
 13225 trivalent.⁴ This is the case of rogative verbs (§18.2) such as *symbi* ‘ask for’ (derived
 13226 from the secundative verb *mbi* ‘give’), which have both a dative argument and a
 13227 semi-object, as shown by (20), but are yet conjugated intransitively (the generic
 13228 subject is marked by *kuu*, §14.3.2.5).

- 13229 (20) <*guojia*> *u-pʰe* <*piaozi*> *nuu-kui-sy-mbi*
 country 3SG.POSS-DAT money IPFV-GENR:S/O-ROG-give
 13230 ‘Ask the government for money.’ (2010, 09)

14.2.6 Intrinsically non-singular subjects

13232 Some intransitive verbs have an intrinsic reciprocal meaning, and do not occur
 13233 in singular form. This category includes most derived reciprocal verbs (§18.4),

⁴This shows that trivalent verbs in Japhug are not necessarily ditransitive (§14.4).

but also some historical reciprocal verbs that are synchronically non-analyzable such as *amumi* ‘be in good terms’, and denominal verbs in *a-* like *anumqaj* ‘fight’ or *ac̥ya* ‘be of the same age’ (§20.2.1). Example (21) provides some examples of verbs of this type. In the corpus, these verbs only occur in dual or plural form.

- (21) *tce a-pi a-bi ra kutcu*
 LNK 1SG.POSS-elder.sibling 1SG.POSS-younger.sibling PL here
a-nuu-tuu-ymuwyro-nuu, ci ci a-tx-tuu-ymumqaj-nuu, ci ci
 IRR-PFV-2-<AUTO>play-PL once once IRR-PFV-2-fight-PL once once
a-tx-tuu-ymumi-nuu qʰe a-ky-tuu-nuu-ryzi-nuu,
 IRR-PFV-2-be.in.good.terms-PL LNK IRR-PFV-2-AUTO-stay-PL
 ‘Brothers, stay here and play, fight from time to time, reconcile with each other from time to time.’ (2003kandzwsqhaj, 43)

The subject of these verbs can be a noun phrase comprising a comitative postpositional phrase in *cʰo* (see §8.2.5 and §9.2.1), in particular with reciprocal verbs (§18.4.1); number indexation on the verb reflects the addition of the added number of all nominals in the noun phrase. For example, in (22) and (23), the verbs have dual indexation, referring to the total number of individuals in the subject noun phrase connected by the comitative *cʰo*.

- (22) <*maerjina*> *nua cʰo <alibaba> ni wuma zo*
 ANTHR DEM COMIT ANTHR DU really EMPH
pjy-k-ymumi-ndzi tce
 PST.IFR-PEG-be.in.good.terms-DU LNK
 ‘Maerjina and Alibaba were in very good terms.’ (140512 alibaba-zh, 306)
- (23) *nxj nx-mu cʰo azo ni ac̥ya-tci*
 2SG 2SG.POSS-mother COMIT 1SG DU be.of.the.same.age:FACT-1DU
 ‘I have the same age as your mother.’ (‘You mother and I have the same age’) (elicited)

The verb *acʰyt* ‘have X years of difference’ has an intrinsically non-singular subject, and is at the same time semi-transitive (§14.2.3), taking as semi-object a temporal noun phrase expressing the age difference between the members of the group referred to by the subject (§19.7.7).

The verb *alulyt* ‘fight’, historically the reciprocal of *lyt* ‘release’ (§18.4.1.3), almost always has non-singular indexation, either with a non-singular intransitive subject as in (24), or with a comitative phrase (25) as in examples (22) and (23) above.

- 13263 (24) *tceki qro ni puu-yluulyt-ndzi*
down ant DU SENS-fight-DU
13264 'Down there two ants are fighting.' (conversation140501-01)
- 13265 (25) *bduxxpakyrpu ui-tcuu c^bondyre a-tcuu ni to-k-yluulyt-ndzi*
ANTHR 3SG.POSS-son COMIT 3SG.POSS-son DU IFR-PEG-fight-DU
13266 'The son of Gdugpa Dkarpo fought with my son.' (2011-04-smanmi, 49)

13267 However, examples with singular indexation are also attested, for instance (26)
13268 and (27) with 2SG form. Both are from texts translated from Chinese, but were
13269 not considered infelicitous by Tshendzin. While direct Chinese influence on in-
13270 dexation is unlikely, the use of *alulyt* 'fight' with the person one fights against
13271 left unexpressed (as in 26) or marked in the dative (as in 27), is not attested else-
13272 where.⁵

- 13273 (26) *ki cuuŋgaa ki puapuuŋuny, nyzo kuu icq^ha mk^hyrmanj yu*
DEM.PROX before DEM.PROX TOP 2SG ERG FILLER people GEN
13274 *nuu-ndža kuu ty-tui-alulyt puu-ŋu tce,*
3PL.POSS-reason ERG AOR-2-fight PST.IPFV-be LNK
13275 'The previous time, you fought for the sake of the people.' (140512 abide
13276 he mogui-zh, 89)
- 13277 (27) *tce nyzo ny-ruu ui-cki, nykinuu, tu-tuu-yluulyt ndyre*
LINK 2SG 2SG.POSS-MB 3SG.POSS-DAT FILLER IPFV-2-fight LNK
13278 *my-pe*
NEG-be.good:FACT
13279 'It is not good for you to fight with your uncle.' (150826 baoliandeng-zh,
13280 185)

13281 The verb *naxtçuy* 'be the same', although requiring the comparison of at least
13282 two entities, most often occurs with singular indexation, as shown by examples
13283 like (28) and (29). This may be due to the fact *naxtçuy* 'be the same' is commonly
13284 used with inanimate referents (§14.6.1.1), and also because it commonly takes de-
13285 greee nominals (§16.3) as subjects in the equative construction (§26.3.1.1). These
13286 degree nominals can take non-singular possessors (dual in 29), but remain them-
13287 selves singular arguments.

⁵The Chinese original sentences of examples (26) and (27) are 你是为众人的利益而战 <nǐ shì wèi zhòngrén de lìyì érzhan> 'You were fighting for the interest of the people' and 你不该和舅舅动手 <nǐ bùgāi hé jiùjiù dòngshǒu> 'You should not get into a fight with your uncle'.

- 13288 (28) *tce nunuu qazo u-yli* *nuu li ts^hyt yuu* *u-yli*
 LNK DEM sheep 3SG.POSS-dung DEM again goat 3SG.POSS-dung COMIT
 13289 *c^ho naxtcuuy zo tce,*
 be.the.same:FACT EMPH LNK
 13290 'Sheep dung is similar to goat dung.'(05-qaZo, 97)
- 13291 (29) *ndzi-tuu-wxti* *jnu-naxtcuuy*
 3DU.POSS-NMLZ:DEG-be.big SENS-be.the.same
 13292 'They have the same size.' ('Their size is the same.') (24-ZmbrWpGa, 24)

14.2.7 Invariable intransitive verbs

13293 A non-negligible amount of intransitive verbs are only attested in 3SG form. Four categories must be distinguished.

13294 First, we find intransitive auxiliary verbs taking complement clauses as intransitive subjects (§24.5.3.1), for instance *jyy* 'be allowed', which has 3SG indexation regardless of the person of the subject or the object in the complement clause, as shown by example (30). For verbs of this type, the indexation restriction is structurally determined and independent of semantics.

- 13301 (30) *azō a-me* *nui [nyzuy ny-rzaβ]* *jnu-k^ham-a]*
 1SG 1SG.POSS-daughter DEM 2SG:GEN 2SG.POSS-wife SENS-give-1SG
 13302 *jyy, [ny-rzaβ a-ky-βze]* *jyy*
 be.allowed:FACT 2SG.POSS-wife IRR-PFV-make[III] be.allowed:FACT
 13303 'If you succeed), I will agree to give my daughter to you in marriage, she
 13304 can become your wife (140518 huifei de mumu-zh, 71)

13305 A second type of invariable verbs are those exclusively attested in noun-verb
 13306 collocations where the noun is the intransitive subject. For instance, the intransitive
 13307 verbs *mbi* and *nguu* are only found⁶ in collocation with *tr-mbru* 'anger' and
 13308 the orphan noun *tu-ko*, meaning 'be angry' and 'be discouraged be frustrated,
 13309 lose heart', respectively. The person and number of the experiencer are marked
 13310 by the possessive prefix on the nouns, as in (31), and since these nouns are always
 13311 singular, the verb indexation is also always in 3SG form.

⁶There are homophonous verbs such as the transitive *mbi* 'give' and the adjectival stative verb *nguu* 'be poor' but these are synchronically and even historically unrealted (*mbi* is an anti-causative verb, see §18.5.4).

- 13312 (31) *nui-mbru* *a-my-tv-ŋgu*, *a*
 2SG.POSS-be.angry(1) IRR-NEG-PFV-be.angry(2) INTERJ
 13313 *nui-ŋo* *a-my-nui-mbi*
 2SG.POSS-be.discouraged(1) IRR-NEG-PFV-be.discouraged(2)
 13314 ‘Don’t be angry, don’t feel frustrated.’ (2003kAndzwsqhaij2, 128)

13315 This constraint on indexation is also found in collocations (§22.4.1) in cases
 13316 when the verb is elsewhere attested, for instance *tui-ŋjiz* + *yi* ‘wish’ (§16.5.1, §24.6.3.3).
 13317 The motion verb *yi* ‘come’ is compatible with all person indexation affixes, but in
 13318 this collocation it is only found in 3SG, regardless of the person of the possessive
 13319 prefix on *tui-ŋjiz*, as shown by (32).

- 13320 (32) *nui a-ŋjiz* *yi* *cti*
 DEM 1SG.POSS-wish come:FACT be.AFF:FACT
 13321 ‘I want that.’ (140520 xiaoyida de huar-zh, 63)

13322 A third type of verbs with restricted 3SG indexation are verbs which pragmatically
 13323 require an inanimate subject, such as *rpju* ‘turn sour’, which can only apply
 13324 with *tv-lu* ‘milk’, as in (33) and would be nonsensical in first or second person.

- 13325 (33) *tv-lu* *to-rpjui*
 INDEF.POSS-milk IFR-turn.sour
 13326 ‘The milk turned sour.’ (elicited)

13327 Fourth, meteorological verbs such as *yutsʰyduy* ‘hot’ or *qanuu* ‘be dark’ occur
 13328 with a dummy intransitive subject, as in (34) and (35). In these examples, *qʰaqʰu*
 13329 ‘behind the house’ and *cyr* ‘night’ are locative and temporal absolute adjuncts
 13330 , respectively (§8.1.9), not the subjects of these sentences.

- 13331 (34) *qʰaqʰu* *myzui* *nui-yutshyduy*
 behind.the.house even.more SENS-be.hot
 13332 ‘It feels even hotter behind the house.’ (conversation 14-05-10)

- 13333 (35) *tce cyr wuma zo ky-qanuu tce*
 LNK night really EMPH AOR-be.dark aboutLNK
 13334 ‘In the night, when it has become very dark.’ (23-qapGAmWmtW, 141)

13335 The noun *tui-muu* ‘sky, weather’ occurs in a few cases as subject of intransitive
 13336 meteorological verbs in the corpus, in examples such as (36), but only in
 13337 texts translated from Chinese. These sentences are rejected by Tshendzin, and

13338 the presence of *tui-mu* ‘sky, weather’ is a calque from Chinese 天氣 <tiānqì>
 13339 ‘weather’.⁷

13340	(36) <i>tcendyre tui-mu</i>	<i>ui-tui-yuutsʰyduay</i>
	LNK	INDEF.POSS-sky 3SG.POSS-NMLZ:degree-be.hot
13341	<i>pjy-syre</i>	<i>zø tce,</i>
	IFR.IPFV-be.ridiculous	EMPH LNK
13342	(140512 fushang he yaomo-zh, 6)	

13343 Some verbs may appear to be invariable only because the non-3SG forms are
 13344 rare. For instance, the auxiliary verb *ra* ‘have to, need’ resembles *jyy* ‘be allowed’
 13345 in taking complement clauses as intransitive subject (§24.5.3.1), and it is almost
 13346 always used in 3SG form. However, in the meaning ‘need, want’, it can take a
 13347 human as subject, and (37) provides an example of 2SG indexation with this verb.

13348	(37) <i>tʰui-nuu-ce</i>	<i>ma, my-tui-ra</i>
	IMP:DOWNTSTREAM-VERT-go	LNK NEG-2-need:FACT
13349	'Go back, (I) don't need you.' (2002 qaCpa, 31)	

13350 14.3 Transitive verbs

13351 14.3.1 The morphological marking of transitivity in Japhug

13352 Transitivity in Japhug can be defined exclusively on the basis of verbal morphology.
 13353 Transitive verbs have the following six common properties.

13354 First, the Aorist 3SG→3' (§21.5.1.1, §21.1.1.1),⁸ a form that is attested on all transitive verbs except for one (§14.3.4) requires a C-type orientation preverb (§15.1.1.1)
 13355 in Kamnyu Japhug. This test can always be applied to distinguish a transitive verb
 13356 from an intransitive one. For instance, the Aorist 3SG→3' of *ndza* ‘eat’ is *ta-ndza*
 13357 ‘he ate it’ with the C-type prefix *ta-*, while an A-type prefix *tr-* would be expected
 13358 if the verb were intransitive (the incorrect form †*tr-ndza*). A potential problem
 13359 with this test is the fact that the result of the merger of A-type orientation preverbs
 13360 with the initial *a-* of contracting verbs (which are always intransitive, see
 13361 §12.3) is formally identical to a C-type prefix, for instance the Aorist 3SG *tr-ala*
 13362 ‘it boiled up’ is realized /*tala/*, the first syllable /*ta-/* being homophonous with

⁷Example (36) corresponds to 由于天气太热 <yóuyú tiānqì tài rè> ‘Because it was too hot’ in the Chinese original.

⁸The notation 3SG→3' means ‘third singular subject with another third person object’, see §14.3.2.

that of *ta-ndza* ‘he ate it’. It is therefore necessary to take into consideration the Factual Non-Past form (§21.3.1.1) to determine whether the stem has initial *a*. A contrast similar to the one between A-type and C-type orientation preverbs is also found on the apprehensive prefix *cu-*, which has a form *ca-* in the 3SG→3’ Past form of transitive verbs (§21.7.1).

Second, verbs with open-syllable stems allowing stem III alternation (-*a*, -*o*, -*u* and -*w*, §12.2.2.1) have stem III in all SG→3 non-past finite forms (§12.2.2.2). For instance, the Factual Non-Past 3SG→3’ of *ndza* ‘eat’ has the stem III form *ndze* ‘he will eat it’. If this were intransitive, the stem I *ndza* would be found instead. This alternation is an effective test to determine if a verb is transitive or not, but its applicability depends on the form of the stem.

Third, transitive verbs require a bare infinitive (§16.2.2) when occurring in specific complement clauses, while intransitive verbs select dental infinitives (§16.2.3). In (38) for example, *ndza* ‘eat’ occurs in a complement clause governed by the phasal verb *tu-za-nuu* ‘they start’ in bare infinitive form. If it were an intransitive verb, a dental infinitive (\dagger *tu-ndza tu-za-nuu*) would be found instead. This criterion is not applicable to all verbs, since some of them cannot occur in the subtype of complement clauses where bare infinitives are found for semantic reasons.

- 13383 (38) *clas* *pjur-si cuŋgu q^he u-ca*
 IDPH(I):immediately IPFV-die before LNK 3SG.POSS-meat
 13384 *u-ndza* *tu-za-nuu.*
 3SG.POSS-BARE.INF:eat IPFV-start-PL

13385 ‘They start eating its flesh just before it dies.’ (20-sWNgi, 57)

13386 Fourth, the subject participles of transitive verbs require a possessive prefix
 13387 coreferent with the object, unless another inflectional prefix (marking orientation,
 13388 polarity or associated motion) precedes the participle prefix *ku-* (§16.1.1.1).
 13389 The subject participle of *ndza* ‘eat’ is thus *u-kuu-ndza* ‘the one who eats it’, and
 13390 the prefix *u-* cannot be removed.⁹

13391 Fifth, transitive verbs with open-syllable stems require the past tense -*t* suffix
 13392 (§11.3, §14.3.2.1, §21.1.3) in Aorist and Past Imperfective 1SG→3 and 2SG→3 forms.
 13393 For example, *tr-ndza-t-a* ‘I ate it’ has this past suffix; if this verb were intransitive,
 13394 a form such as \dagger *tr-ndza-a* would be found instead. This criterion only applies to
 13395 open-syllable transitive verbs allowing first and second person subjects.

⁹In the negative form /mꝝ-kuu-ndza/ (NEG-PCP:SBJ-eat) ‘the one who does not eat it’, by contrast, the possessive prefix *u-* is optional.

13396 Sixth, the Progressive *asu-* (§21.6.1.1) is only found on transitive verbs. For
 13397 instance, the transitive verb *ndza* ‘eat’ has a Progressive Sensory 3SG→3’ form
 13398 *jnu-ṛṣuu-ndza* ‘He is eating it’, which would not exist if this verb were intransitive.

13399 Seventh, only transitive verbs¹⁰ can take the inverse *wy-* (§14.3.2.7) and the
 13400 portmanteau *kū-* 2→1 and *ta-* 1→2 prefixes (§14.3.2.3). The portmanteau prefixes
 13401 are only found on verbs allowing human subjects and objects.

13402 These seven criteria are almost completely congruent. With the exception of
 13403 a handful of defective verbs (§14.3.4), the dummy transitive subject construction
 13404 (§14.3.5), and the antipassive forms of some secundative verbs (§14.4.2, §18.6.4), if
 13405 a verb satisfies one of these criteria, it will satisfy them all. This excludes cases
 13406 when particular tests are not applicable, in particular criteria 2 and 5 if the verb
 13407 has a closed-syllable stem or 3, 5, 6 and 7 due to semantic incompatibility. Only
 13408 criteria 1 and 4 apply to all verbs.

13409 Intransitive verbs, including semi-transitive verbs (§14.2.3) do not satisfy any
 13410 of these seven criteria, as can be exemplified with the verb *tso* ‘know, understand’
 13411 (Table 14.3 and example 39 illustrating test 3).

Table 14.3: Transitivity tests with the semi-transitive verb *tso* ‘know, understand’

Test	Attested Form	Expected form if transitive
1 3SG Aorist (C-type preverb)	<i>kṛ-tso</i>	† <i>ka-tso</i>
2 Factual 3SG (Stem III)	<i>tso</i>	† <i>tsym</i>
3 Dental infinitive	<i>tui-tso (kṛ-ṛ̥-t-a)</i> (39)	† <i>u-tso (kṛ-ṛ̥-t-a)</i>
4 Subject participle	<i>kū-tso</i>	† <i>u-kū-tso</i>
5 Past tense 1/2SG	<i>kṛ-tso-a</i>	† <i>kṛ-tso-t-a</i>
6 Progressive	—	† <i>asuu-tso</i>
7 Inverse or portmanteau prefix	—	† <i>γu-tso</i>

- 13412 (39) *azō tui-tso kṛ-ṛ̥-t-a*
 13413 1SG INF:II-understand AOR-start-PST:TR-1SG
 ‘I began to understand.’ (elicited)

¹⁰ Antipassive secundative verbs such as *r̥mbi* ‘give to someone’ are the only exception, see §14.4.2.2, examples (114a) and (114b).

13414 The morphosyntactic specificities of transitive verbs are not limited to inflec-
 13415 tional verbal morphology. Some derivational processes, such as antipassivization
 13416 (§18.6) and anticausativization (§18.5.1.2) can only be applied to transitive verbs,
 13417 and conversely other derivations (such as the applicative, §17.4) are only attested
 13418 on intransitive verbs. Since derivational morphology however, is not as produc-
 13419 tive as inflectional morphology and can be sometimes ambiguous, these charac-
 13420 teristics cannot be used to define transitivity in Japhug.

13421 Another distinction between transitive and intransitive verbs is the fact that
 13422 transitive subjects require ergative marking (§8.2.2.1), whereas intransitive sub-
 13423 jects are generally in absolute form (§8.1.1). This is not an absolute criterion to
 13424 distinguish between transitive and intransitive verbs, however, since some tran-
 13425 sitive verbs have a dummy subject (§14.3.5), and since intransitive verbs with
 13426 ergative marking are attested in specific contexts (§8.2.2.3, §8.2.2.2).

13427 14.3.2 Polypersonal indexation and direction marking

13428 In Japhug, as in other Gyalrongic languages, transitive verbs index two argu-
 13429 ments, the transitive subject and the object. This section provides a detailed ana-
 13430 lysis of the transitive indexation paradigm in comparison with the intransitive
 13431 conjugation.

13432 The transitive conjugation comprises 31 different forms for each TAME cate-
 13433 gory, as listed in Table 14.6 on p.541. Table 14.7 exemplifies this paradigm using
 13434 the Factual Non-Past of the verb *mto* ‘see’. These two-dimensional tables (and
 13435 all other such tables in this chapter) list the subjects as rows and the objects
 13436 as columns. The polypersonal configurations are represented using the notation
 13437 $A \rightarrow P$, where A stands for the person and number of the transitive subject, and
 13438 P for that of the object; for instance 1SG → 3DU means ‘first singular subject with
 13439 third DU object’. 3’ represents obviative third person, a concept described in more
 13440 detail in §14.3.2.2. The shaded cells 1 → 1, 2 → 2, 3 → 3 and 3’ → 3’ correspond to re-
 13441 flexive forms, which are not transitive in Japhug, and are expressed by deriving
 13442 an intransitive verb using the prefix *zyr-* (§18.3). Generic person (§14.3.2.5) is not
 13443 included in Table 14.6.

13444 One of the most fundamental features of the Japhug indexation system is the
 13445 fact that the affixes found in the intransitive paradigm also occur in the transitive
 13446 conjugation, and can index either the subject (intransitive S or transitive A) or the
 13447 object (O) (depending on the presence or absence of direction marking, §14.3.2.8)
 13448 as illustrated in Table 14.4 with the suffix *-a* and the prefix *tu-*. In other words,
 13449 the indexation affixes reflect neutral alignment.

Table 14.4: Neutral alignment

	S	A	O
1SG -a	<i>yi-a</i> ‘I will come’	<i>mtam-a</i> ‘I will see it’	<i>yuu-mto-a</i> ‘he will see me’
2SG <i>tuu-</i>	<i>tuu-yi</i> ‘You will come’	<i>tuu-mtym</i> ‘You will see it’	<i>tú-wy-mto</i> ‘he will see you’

When studying indexation systems of this type, it is useful to divide the space of bipersonal indexation into three domains (Zúñiga 2006; Jacques & Antonov 2014): the LOCAL domain (when both subject and object are first or second person), the NON-LOCAL domain (when both subject and object are third person) and the MIXED domain (one argument is first or second person and the other one is third person). Table 14.5 represents these three domains in blue, red and green, respectively.

Table 14.5: The three domains of the transitive paradigm

	1	2	3
1		1→2	1→3
2	2→1		2→3
3	3→1	3→2	3→3
INTR	1	2	3

In the following sections, we first present the forms of the transitive paradigm in each of the three domains, then discuss some specific issues (generic and double number indexation) and then analyze the structure of the Japhug indexation system in a typological perspective.

Table 14.6: Japhug transitive and intransitive paradigms

	1SG	1DU	1PL	2SG	2DU	2PL	3SG	3DU	3PL	3'
1SG							$\Sigma_3\text{-}a$	$\Sigma_3\text{-}a\text{-}ndzi$	$\Sigma_3\text{-}a\text{-}nu$	
1DU									$\Sigma_1\text{-}tci$	
1PL									$\Sigma_1\text{-}ji$	
2SG	<i>kui</i> - $\Sigma_1\text{-}a$								<i>tui</i> - Σ_3	
2DU	<i>kui</i> - $\Sigma_1\text{-}a\text{-}ndzi$								<i>tui</i> - $\Sigma_1\text{-}ndzi$	
2PL	<i>kui</i> - $\Sigma_1\text{-}a\text{-}nu$								<i>tui</i> - $\Sigma_1\text{-}nu$	
3SG	<i>wyú</i> - $\Sigma_1\text{-}a$									Σ_3
3DU	<i>wyú</i> - $\Sigma_1\text{-}a\text{-}ndzi$									$\Sigma_1\text{-}ndzi$
3PL	<i>wyú</i> - $\Sigma_1\text{-}a\text{-}nu$									$\Sigma_1\text{-}nu$
3'										
INTR	$\Sigma_1\text{-}a$	$\Sigma_1\text{-}tci$	$\Sigma_1\text{-}ji$	<i>tui</i> - Σ_1	<i>tui</i> - $\Sigma_1\text{-}ndzi$	<i>tui</i> - $\Sigma_1\text{-}nu$	<i>wyú</i> - Σ_1	<i>wyú</i> - $\Sigma_1\text{-}ndzi$	<i>wyú</i> - $\Sigma_1\text{-}nu$	
							Σ_1	$\Sigma_1\text{-}ndzi$	$\Sigma_1\text{-}nu$	

Table 14.7: The paradigm of the verb *mto* ‘see’ in the Factual non-past

	1SG	1DU	1PL	2SG	2DU	2PL	3SG	3DU	3PL	3'
1SG							<i>mtam</i> - <i>a</i>	<i>mtam</i> - <i>a</i> - <i>ndzi</i>	<i>mtam</i> - <i>a</i> - <i>nu</i>	
1DU									<i>mto</i> - <i>tci</i>	
1PL									<i>mto</i> - <i>j</i>	
2SG	<i>kui</i> - <i>mto</i> - <i>a</i>								<i>tui</i> - <i>mtxym</i>	
2DU	<i>kui</i> - <i>mto</i> - <i>a</i> - <i>ndzi</i>								<i>tui</i> - <i>mto</i> - <i>ndzi</i>	
2PL	<i>kui</i> - <i>mto</i> - <i>a</i> - <i>nu</i>								<i>tui</i> - <i>mto</i> - <i>nu</i>	
3SG	<i>wyú</i> - <i>mto</i> - <i>a</i>									<i>mtym</i>
3DU	<i>wyú</i> - <i>mto</i> - <i>a</i> - <i>ndzi</i>									<i>mto</i> - <i>ndzi</i>
3PL	<i>wyú</i> - <i>mto</i> - <i>a</i> - <i>nu</i>									<i>mto</i> - <i>nu</i>
3'										
							<i>wyú</i> - <i>mto</i>	<i>wyú</i> - <i>mto</i> - <i>ndzi</i>	<i>wyú</i> - <i>mto</i> - <i>nu</i>	

13461 14.3.2.1 Mixed configurations

13462 In the mixed domain, we have to distinguish between *direct* configurations, where
 13463 the subject is first or second person and the object is third person (1→3, 2→3) and
 13464 *inverse* configurations, where the opposite holds true (3→1, 3→2).¹¹

13465 Table 14.8 presents all 1→3 and 2→3 forms (except 1SG→3DU/PL, which are
 13466 discussed in §14.3.2.6) of *mto* ‘see’ in the Factual Non-Past and the Aorist, com-
 13467 pared with the corresponding forms of the intransitive verb *ngo* ‘be ill’. The
 13468 DOWNWARDS *puu-* and UPWARDS *tr-* preverbs are lexically selected by these verbs
 13469 (§15.1.5.9).

Table 14.8: Mixed domain (direct forms) compared with the intransitive paradigm

Person	Transitive		Intransitive	
	Non-Past	Past	Non-Past	Past
1SG(→3SG)	<i>mtam-a</i>	<i>puu-mto-t-a</i>	<i>ngo-a</i>	<i>tr-ngo-a</i>
1DU(→3)	<i>mto-tci</i>	<i>puu-mto-tci</i>	<i>ngo-tci</i>	<i>tr-ngo-tci</i>
1PL(→3)	<i>mto-j</i>	<i>puu-mto-j</i>	<i>ngo-j</i>	<i>tr-ngo-j</i>
2SG(→3)	<i>tuu-mtym</i>	<i>puu-tuu-mto-t</i>	<i>tuu-ngo</i>	<i>tr-tuu-ngo</i>
2DU(→3)	<i>tuu-mto-ndzi</i>	<i>puu-tuu-mto-ndzi</i>	<i>tuu-ngo-ndzi</i>	<i>tr-tuu-ngo-ndzi</i>
2PL(→3)	<i>tuu-mto-nuu</i>	<i>puu-tuu-mto-nuu</i>	<i>tuu-ngo-nuu</i>	<i>tr-tuu-ngo-nuu</i>

13470 With the exception of 1SG→3 forms (on which see §14.3.2.6), the number of
 13471 the third person argument is never expressed in the mixed domain. Examples
 13472 (40) and (41) illustrate 1PL→3SG and 1PL→3DU forms, respectively. Whether the
 13473 third person object is singular or dual, person indexation is restricted to the 1PL
 13474 -*ji* suffix in both cases. The same is true of the -*tci* suffix, and also in inverse
 13475 configurations.

- 13476 (40) *tce izo ji-k^ha* *kuny ky-fstun-i* *puu-ra*
 LNK 1PL 1PL.POSS-house also AOR-SERVE-1PL PST.IPFV-be.needed.o
 13477 ‘We also had to take care of him in our house.’ (14-siblings, 360)
- 13478 (41) *ny-wuu* *c^ho* *ny-ki* *ni pjui-sat-i*
 2SG.POSS-grandfather COMIT 2SG.POSS-younger.sibling DU IPFV-kill-1PL
 13479 *ŋu*
 be:FACT
 13480 ‘We will kill your grandfather and your brother.’ (2011-05-nyima, 132)

¹¹This terminology will be justified in §14.3.2.8.

13481 Although the indexation suffixes *-ndzi* and *-nu* are the same for second and
 13482 third person (§14.2.1.2), in 2→3 and 3→2 configurations, they can only index the
 13483 number of the second person argument, never that of the third person. For in-
 13484 stance, in (42), *to-tuu-yut* is 2SG→3PL, and adding a plural *-nu* here would change
 13485 the meaning to ‘you_{pl} brought people’ and be incompatible with the singular
 13486 pronoun *nyzo*.

- 13487 (42) *nyzo turme ra to-tuu-yut tce,*
 2SG people PL IFR:UP-2-bring LNK
 13488 ‘You(SG) brought people (here).’ (150901 changfamei, 155)

13489 The direct forms of the transitive paradigm are nearly all identical to the cor-
 13490 responding intransitive paradigm. The 1SG→3 and 2SG→3 forms are the only
 13491 ones that show morphological features absent from the corresponding intransi-
 13492 tive paradigm: the Stem III alternation in the Factual Non-Past (and other tenses,
 13493 §12.2.2.2, §21.1.2)¹² and the *-t* suffix in the Past. These features are highlighted
 13494 in red in Table 14.8. Most dialects of Japhug, including those of Gdongbryad
 13495 township, have *-z* instead of *-t* as Past suffix (§11.3).

13496 Stem III alternation and the *-t* suffix mark at the same time TAME (§21.1.3, §11.3)
 13497 and person of both subject and object, and must be considered to be an integral
 13498 part of the person indexation system.

13499 Not all transitive verbs present these two features, however; in particular, verb
 13500 with close syllable stems lack both of them. Stem alternation is restricted to a
 13501 few open-syllable stem types (-o, -a, -u and -u, §12.2.2.1), and the *-t* suffix cannot
 13502 surface in close syllable stems. For instance, the Aorist 1SG→3SG of the verbs *joꝝ*
 13503 ‘raise’ and *cluy* ‘drop’ are *tr-joꝝ-a* ‘I raised it’ and *pui-cluy-a* ‘I dropped it’, not
 13504 the completely incorrect *†tr-joꝝ-t-a* or *†pui-cluy-t-a* (with automatic regressive
 13505 devoicing of /t/ and /y/ before /t/, §3.2.2). These incorrect forms would not
 13506 violate Japhug phonotactics, since clusters such as -xt- and -xt- are well attested
 13507 (§4.2.1.7, §4.2.1.8), showing that the rules governing the use of the *-t* suffix are not
 13508 purely phonological.

13509 The direct forms of transitive verbs with closed syllable stems (such as *joꝝ*
 13510 ‘raise’ and *cluy* ‘drop’) in the mixed domain are thus identical to that of intransi-
 13511 tive verbs.

13512 The inverse forms of the mixed domain of the verb *mto* ‘see’ are presented
 13513 in Table 14.9. All forms in this section of the paradigm, regardless of the TAME
 13514 category, take the prefix *yú-/wy-*, whose distribution and allomorphy (*yú-* vs. *wy-*)
 13515 is discussed in more detail in §14.3.2.7.

¹²Note in addition the allomorph *mtam-* of stem III when followed by the 1sg suffix /-a/, following regular vowel assimilation (§14.2.1.1).

Table 14.9: Mixed domain (inverse forms)

Person	Non-Past	Past
3SG→1SG	<i>yú-mto-a</i>	<i>pú-wy-mto-a</i>
3→1DU	<i>yú-mto-tci</i>	<i>pú-wy-mto-tci</i>
3→1PL	<i>yú-mto-j</i>	<i>pú-wy-mto-j</i>
3→2SG	<i>tú-wy-mto</i>	<i>pú-tú-wy-mto</i>
3→2DU	<i>tú-wy-mto-ndzi</i>	<i>pú-tú-wy-mto-ndzi</i>
3→2PL	<i>tú-wy-mto-nuu</i>	<i>pú-tú-wy-mto-nuu</i>

13516 Aside from the prefix *yú-/wy-*, the inverse forms in the mixed domain present
 13517 the same affixes as those of the corresponding intransitive forms (except in the
 13518 case of double number indexation, treated in §14.3.2.6), and lack stem alternation
 13519 (only stem I occurs).

13520 The imperative (§21.4.2.1) is only attested in the direct mixed 2→3 configurations,
 13521 and is the only finite form involving a second person that neither takes the
 13522 second person prefix nor a portmanteau prefix. To express 2→1 imperative, the
 13523 imperfective is used instead (§21.2.5).

14.3.2.2 Non-local configurations

13524 Table 14.10 presents the Non-local domain of the paradigm of *mto* ‘see’ in the
 13525 Factual Non-Past and the Aorist, compared with the intransitive paradigm as
 13526 exemplified by *ngo* ‘be ill’.

Table 14.10: Non-local domain compared with the intransitive paradigm

Person	Transitive		Intransitive	
	Non-Past	Past	Non-Past	Past
3SG(→3')	<i>mtym</i>	<i>pa-mto</i>	<i>ngo</i>	<i>tr-ngo</i>
3DU(→3')	<i>mto-ndzi</i>	<i>pa-mto-ndzi</i>	<i>ngo-ndzi</i>	<i>tr-ngo-ndzi</i>
3PL(→3')	<i>mto-nuu</i>	<i>pa-mto-nuu</i>	<i>ngo-nuu</i>	<i>tr-ngo-nuu</i>
3'→3SG	<i>yú-mto</i>	<i>pú-wy-mto</i>		
3'→3DU	<i>yú-mto-ndzi</i>	<i>pú-wy-mto-ndzi</i>		
3'→3PL	<i>yú-mto-nuu</i>	<i>pú-wy-mto-nuu</i>		

13528 There are two types of non-local forms: those taking the *yú-/wy-* prefix, the
 13529 *inverse* configurations (§14.3.2.8), and those without it, the *direct* configurations.

13530 Direct forms present two features distinguishing them from the corresponding
 13531 third person intransitive forms. First, in non-past tenses such as the Factual Non-
 13532 Past, the 3SG subject form has Stem III (like the 1SG→3 and 2SG→3 forms of the
 13533 mixed domain, §14.3.2.1). Second, in the Aorist, a C-type orientation preverb, with
 13534 -*a*- vocalism is used instead of the A-type orientation preverbs in -*u*- and -*y*- found
 13535 in the mixed and local domains (*pui-* in the case of the verb *mto* ‘see’). C-type
 13536 orientation preverbs, only found in this section of the transitive paradigm (§14.3.1,
 13537 §15.1.1.1), result from the fusion of A-type prefixes with another prefix which is
 13538 only otherwise attested in the Apprehensive (§21.7.1).

13539 The -*t* suffix found in some direct forms in the mixed domain (§14.3.2.1) is not
 13540 attested in the non-local domain.

13541 Inverse forms of the non-local domain only differ from the third person in-
 13542 transitive forms by the presence of the *yú-/wy-* prefix, lacking stem alternation
 13543 or additional affixes, like the inverse forms of the mixed domain (§14.3.2.1).

13544 Number indexation in the non-local domain encodes only one of the two ar-
 13545 guments: the *subject* in the direct configurations and the *object* in the inverse
 13546 configurations. For instance, in (43), the subject of the verb *pjy-wy-nysma-ndzi* is
 13547 plural (3PL→3DU), but plural indexation -*nuu* here instead of the dual would be
 13548 incorrect, as this verb form has the *yú-/wy-* prefix and thus agrees in number
 13549 with the object.

13550 (43) *ndzi-julco ra kuu wuma pjy-wy-nysma-ndzi.*

3DU.POSS-neighbour PL ERG really IFR-INV-envy-DU

13551 ‘Their neighbours envied the two of them.’ (qajdoskAt, 14)

13552 The third person argument whose number is indexed (the 3DU argument in 43)
 13553 is called *proximate*, and the one that is not indexed on the verb (corresponding to
 13554 the noun phrase *ndzi-julco ra* in 43) is called *obviative* (glossed as 3'), using ter-
 13555 minology from Algonquian linguistics. While in Algonquian the term *obviative*
 13556 (coined by Cuoq 1866) originally refers to a category marked on both nouns and
 13557 verb indexation (including intransitive verbs), in Gyalrong languages the prox-
 13558 imate/obviative contrast is only reflected in transitive verbal morphology (see
 13559 §14.3.2.8 and §14.3.3)

13560 Direct configurations are by far more common in the corpus than inverse ones.
 13561 Inverse non-local forms have two functions: marking the relative saliency of the
 13562 subject and the object (a question detailed in §14.3.3) and indexing a generic sub-
 13563 ject (§14.3.2.5).

13564 14.3.2.3 Local configurations

13565 Local configurations stand out in Japhug verbal paradigms in being the only
 13566 forms involving the second person without a *tu-* prefix. Instead, synchronically
 13567 unanalyzable portmanteau prefixes are found: *ta-* for 1→2, and *ku-* for 2→1. The
 13568 *ta-* co-occurs with the non-first person dual and plural suffixes (-*ndzi* and -*nu*,
 13569 §14.2.1.2), and *ku-* with first person suffixes (-*a*, -*tçi* and -*ji*, §14.2.1.1), indexing in
 13570 all cases the person and number of the object. In 2→1 forms, the first person is
 13571 redundantly indexed both by the suffixes and the portmanteau prefix *ku-*.

13572 The presence of portmanteau prefixes in the local domain is not typologically
 13573 unusual. Typologists have long noticed that languages with polypersonal indexation
 13574 tend to have unanalysable affixes in 1→2 and 2→1 forms (Heath 1998) in part
 13575 due to pragmatic factors (DeLancey 2018). The historical origin of these prefixes
 13576 is discussed in Jacques (2018c) and §14.8.3.

13577 In 1→2 configurations, since 2SG is exclusively indexed by the *tu-* prefix in
 13578 the intransitive paradigm, without any suffix (unlike Situ, §14.8.1), the 1→2SG
 13579 also lacks any indexation suffix. Table 14.11 presents all local configurations of
 13580 the verb *mto* ‘see’ in the Factual Non-Past and the Aorist, except for those with
 13581 double suffixation (2DU→1SG and 2PL→1SG) which are treated in §14.3.2.6.

13582 There is no stem alternation, -*t* past tense suffix or *yuu-/wy-* prefix in the local
 13583 domain in Japhug. Aorist and Factual Non-Past only differ from each other by
 13584 the presence of the A-type orientation preverb in the former, as can be seen in
 13585 Table 14.11.

Table 14.11: Local domain

Person	Non-Past	Past
1→2SG	<i>ta-mto</i>	<i>puu-ta-mto</i>
1→2DU	<i>ta-mto-ndzi</i>	<i>puu-ta-mto-ndzi</i>
1→2PL	<i>ta-mto-nu</i>	<i>puu-ta-mto-nu</i>
2SG→1SG	<i>kuu-mto-a</i>	<i>puu-kuu-mto-a</i>
2→1DU	<i>kuu-mto-tçi</i>	<i>puu-kuu-mto-tçi</i>
2→1PL	<i>kuu-mto-j</i>	<i>puu-kuu-mto-j</i>

13586 In Japhug, the forms of the local domain are always different from those of the
 13587 mixed domain, and the person of the subject and the object is never ambiguous. In
 13588 this regard, Japhug differs from many languages of the Trans-Himalayan family,
 13589 in particular those of the Kiranti branch. In Khaling, for instance, the same forms
 13590 are used for 2→1 and 3→1 configurations on the one hand, and for 3→2 and

13591 1NSG→2 on the other hand (Jacques et al. 2012). In that language, the only local
 13592 configuration to have specific unambiguous forms is 1SG→2.

13593 In Japhug, while person is unambiguously expressed in the local domain, only
 13594 the number of the *object* is specified, with the exception of 2→1SG configurations
 13595 (§14.3.2.6). Examples (44) and (45) illustrate the same form *tu-ta-fsraŋ* meaning in
 13596 the first case 1SG→2SG ‘I will save you_{sg}’ and in the second one 1PL→2SG ‘We will
 13597 save you_{sg}’, showing that the form remains identical regardless of the number of
 13598 the subject.

- 13599 (44) *tce azo tu-ta-fsraŋ ra tce,*
 LNK 1SG IPFV-1→2-protect be.needed:FACT LNK
 13600 ‘I have to save you.’ (150901 changfamei-zh, 219)

- 13601 (45) *izora nunu koyla zo tu-ta-fsraŋ, tu-ta-βri pui-suiso-j*
 1PL DEM really EMPH IPFV-1→2-protect IPFV-1→2-save IPFV-think-1PL
 13602 *cti ri,*
 be.AFF:FACT LNK
 13603 ‘We really want to save you.’ (niulan li de lu-zh, 25)

13604 Similarly, (46) and (47) show the form *tu-kuu-qur-i* meaning 2SG→1PL ‘You_{sg}
 13605 help us’ in the first example and 2PL→1PL ‘You_{pl} help us’ in the second one.

- 13606 (46) *wortc^{hi} wojyr zo tu-kuu-qur-i ra*
 please please EMPH IPFV-2→1-help-1PL be.needed:FACT
 13607 ‘Please, help us.’ (150827 taisui-zh, 22)

- 13608 (47) <*chuhuaiwang*> *c^ho nura, kumab nura nua-cki,*
 ANTHR COMIT DEM:PL other DEM:PL 3PL.POSS-DAT
 13609 “*yuu-tu-kui-qur-i pui-nts^{hi}*” *z-jo-sui-ti.*
 CISL-IPFV-2→1PL SENS-be.better TRAL-IFR-CAUS-say
 13610 ‘He sent (someone) to the king Huai of Chu and the other ones to tell
 13611 them ‘Come and help us’. (160721 pofuchenzhou-zh, 26)

13612 The 2→1 configuration can occur in the prohibitive with the prefix *ma-* (§13.1.1)
 13613 as in the form *ma-t^huu-kuu-βluu-a* ‘don’t burn me’ in (48), but not in the imperative
 13614 (§21.4.2.1). Instead, the Imperfective is used (§21.2.5), most often with a modal
 13615 verb, as in (46) and (47) and in the form *c^huu-kuu-rku-a* in (48). Attempts to produce
 13616 2→1 Imperative forms such as †*tr-kuu-qur-i* (instead of the correct *tu-kuu-qur-i ra*
 13617 ‘help us’) are rejected by native speakers.

- 13618 (48) *ma-t^hu-kui-βlur-a, tc^horzi w-ŋgwu*
 PROHIB-IMP-2→1-burn-1SG wine.jar 3SG.POSS-inside
 13619 *c^hu-kui-rku-a*
 IPFV:DOWNSTREAM-2→1-put.in-1SG
 13620 'Don't burn me, put me in a wine jar.' (2003 Kunbzang, 385)

14.3.2.4 Inclusive semi-reflexive configurations

13622 Japhug lacks inclusive / exclusive contrast in both pronouns and indexation sys-
 13623 tem (§14.2.1.1), and inclusive persons are treated the same way as 1DU and 1PL
 13624 exclusive. While inclusive persons could in principle exist in the local domain,
 13625 configuration of this type are problematic: if the subject or object of a transitive
 13626 verb is inclusive, and the other argument strictly first or second person, the re-
 13627 sulting configuration is partially reflexive, since the inclusive contains both first
 13628 and person referents.

13629 In a language like Japhug where reflexivity is marked by an intransitivizing
 13630 derivation (§18.3), there is therefore a conflict between the absence of reflexive
 13631 forms in the transitive paradigm and the need to express inclusive↔first/second
 13632 person configurations in a way that is different from plain reflexives.

13633 The following list provides the four theoretically possible inclusive semi-reflex-
 13634 ive configurations, displaying the referent shared by subject and object in red.
 13635 This list neglects possible additional third person referents in 1DU exclusive, 1PL,
 13636 2DU and 3PL arguments, which would artificially increase the number of config-
 13637 urations.

- 13638 • 1+2→1 'You and I **verb** me'
- 13639 • 1+2→2 'You and I **verb** you'
- 13640 • 1→1+2 'I **verb** you and me'
- 13641 • 2→1+2 'You **verb** you and me'

13642 van Driem (1990), in his review of Michailovsky (1988), argues that Kiranti
 13643 languages and Limbu in particular cannot express inclusive semi-reflexive con-
 13644 figurations using transitive verbal morphology, and must resort to periphrases;
 13645 for instance, in order to express the meaning of the 2→1+2 configuration 'you
 13646 saw both of us in the mirror', Limbu uses a complement clause containing an in-
 13647 transitive verb meaning 'you and I appear in the mirror', object of the transitive
 13648 verb 'see', as in (49).

- 13649 (49) *khene? anchi aina-o a-dha:p-si-ba kε-ni*
 2SG 1DI mirror-LOC INCL-be.visible-DU-NMLZ 2-see
 13650 ‘You(sg) saw both of us in the mirror.’ (van Driem 1990: 277)

13651 In Japhug, a similar strategy (though with a finite clause instead of a nominalized verb form) is employed to express the 1→1+2 configuration in (50), with the
 13652 finite complement clause *χcylzgon u-ŋgu kx-ntc^hyr-tci* ‘we appear in the mirror’
 13653 as object of the transitive perception verb *mto* ‘see’.

- 13655 (50) *[χcylzgon u-ŋgu kx-ntc^hyr-tci] nura pu-mto-t-a*
 13656 mirror 3SG.POSS-in AOR-appear-1DU DEM:PL AOR-see-PST:TR-1SG
 13657 ‘I saw both of us in the mirror.’ (elicitation, Jacques 2012a: 85)

13658 Nevertheless, there are cases in Japhug where inclusive semi-reflexive meanings
 13659 can be expressed by simple verb forms of the local domain. In example (51),
 13660 the verb *kui-z-maq^hu-tci* presents a 2→1DU configuration (§14.3.2.3); it is clear in
 13661 this particular case that the object is first dual inclusive ‘you and I’ rather than
 13662 first exclusive, and that we therefore have a semi-reflexive configuration 2→1+2.

- 13663 (51) *múj-tur-mbyom ri t^ha kui-z-maq^hu-tci*
 13664 NEG:SENS-2-be.in.a.hurry LNK later 2→1-CAUS-be.after:FACT-1DU
 13665 ‘(If) you don’t hurry (up), you will get us late.’ (elicited)

13666 No example of this type is found in the corpus, and such pragmatically clumsy
 13667 configurations are on the borderline of the Japhug person indexation system.

13668 Semi-reflexive indexation also occurs with third person referents, in particular
 13669 in causative constructions (see 24, §17.2.4).

14.3.2.5 Generic indexation

13670 The prefix *kui-*, which appears in the intransitive paradigm to express generic
 13671 intransitive subject (§14.2.1.2), is also attested in the transitive paradigm to refer
 13672 to generic object. For instance, in example (52),¹³ the transitive verbs *kui-mto* ‘(the
 13673 yet) will see one’ and *kui-ndo* ‘(the yet) will catch one’ have the same *kui-* prefix
 13674 as the intransitive verb *a-my-jy-kui-phyo* ‘one should not flee’. This example also
 13675 shows that stem I is selected in the 3→GENR form, as the stem III of *mto* ‘see’ and
 13676 *ndo* ‘catch’ are *mtym* and *ndym*, respectively. Combining the generic *kui-* prefix
 13677 with stem III is impossible, and *kui-mto* cannot be replaced by a form such as
 †*kui-mtym*, which would be unintelligible.

¹³The generic person in (52) is translated into English by the second person ‘you’.

- 13678 (52) *wr-q^hu-c^hu* *wr-stu* *zo*
 3SG.POSS-behind-APPROX.LOC 3SG.POSS-direction EMPH
 13679 *a-my-jx-kw-phyo* *ra* *ma tce kui-mto*
 IRR-NEG-IPFV-GENR:S/O-flee be.needed:FACT LNK LNK GENR:S/O-see:FACT
 13680 *tce kui-ndo* *cti* *tu-ti-nu*
 LNK GENR:S/O-take:FACT be.AFF:FACT IPFV-say-PL
 13681 ‘People say that you should not flee in the direction behind it (the yeti), as
 13682 it would see you and catch you.’ (140510 mYWrgAt, 20)

13683 Unlike in Tshobdun (Sun 2014b), generic transitive subjects in Japhug are not
 13684 indexed by the same prefix as generic intransitive subjects. Apart from a handful
 13685 of irregular verbs (§14.3.4), the inverse prefix *wy-* occurs instead of *kui-* to express
 13686 generic transitive subject, as in the verb *tú-wy-ndza* ‘one eats it’ in (53), whose ob-
 13687 ject is definite (anaphorically referring to the noun *k^hurwum* ‘mold’ in a previous
 13688 clause). Note that the generic subject of *tú-wy-ndza* is co-referent with the object
 13689 of the verb *nui-kui-z-nutufçyl* ‘it causes one to have diarrhea’ (causative of the
 13690 intransitive verb *nutufçyl* ‘have diarrhea’, on which see §16.4.4) in the following
 13691 clause, indexed with the *kui-* as in (52) above, and that conversely the (inanimate)
 13692 object of *tú-wy-ndza* corresponds to the subject of *nui-kui-z-nutufçyl*.

- 13693 (53) *ma tú-wy-ndza tce, nui-kui-z-nutufçyl* *cti*
 LNK IPFV-INV-eat LNK IPFV-GENR:S/O-CAUS-have.diarrhea be.AFF:FACT
 13694 ‘If you eat (mold), it causes you diarrhea.’ (20-sWrna, 56)

13695 Generic person indexation is remarkable in Japhug morphosyntax in being
 13696 one of the very few examples of ergative-absolutive alignment outside of the
 13697 case marking system, since the intransitive subject and the object are marked by
 13698 the same prefix *kui-*, while the transitive subject is not ($S = P \neq A$).

13699 A generic person subject or object is only compatible with a third person ar-
 13700 gument (GENR→3 or 3→GENR). Combinations with first or second persons are
 13701 not possible. However, number indexation of the non-generic third person argu-
 13702 ment is possible when the generic argument is subject. Dual or plural suffixes
 13703 in GENR→DU or GENR→PL configurations are attested in procedural texts. For
 13704 instance, (54) has dual indexation (referring to the turnip leaves and the turnip
 13705 root) with generic human subject.

- 13706 (54) *rasti c^ho ryjndob ni, pjú-wy-bndzyr-ndzi tce*
 turnip COMIT turnip.root DU IPFV-INV-cut-DU LNK
 13707 *pjú-wy-z-nuincyt-ndzi* *ŋu.*
 IPFV-INV-CAUS-ACAUS:separate-DU be:FACT
 13708 ‘One separates the turnip from its root by cutting them.’ (150903 kAJar, 7)

13709 Number indexation occurs in particular in the case of generic subject indexation
 13710 referring to a first person (§14.6.1.4). In (55), the generic subject of the verb
 13711 *tú-wy-qur-nu* corresponds to the first person plural, as indexed on the preceding
 13712 verb *rÿzi-j*, and the plural object is overtly indexed.

- 13713 (55) *tui-rdoꝝ tsa rÿzi-j tce tú-wy-qur-nuꝝ raꝝmasꝝ*
 one-piece a.little stay:FACT-1PL LNK IPFV-INV-help-PL SFP
 13714 ‘Let at least one of us stay here and help them!’ (hist180503 xiyouji 12-zh,
 13715 78)

13716 On the other hand, when the generic argument is in object or intransitive
 13717 subject function, no person indexation suffix can appear on the verb, even if this
 13718 argument is realized as an overt noun phrase with plural marking in addition to
 13719 generic indexation.

13720 For instance, in (56), the verb form with generic object indexation *ku-kuu-su-*
 13721 *ndo* lacks any indexation suffix, although both the causer ('the elders') and the
 13722 causee (the generic argument, *tr-pytso ra* ‘us, the children’) are plural.

- 13723 (56) *qazo c^hu-kryy-nuꝝ tce tr-pytso ra kui nuꝝ qazo yuꝝ*
 sheep IPFV-shear-PL LNK INDEF.POSS-child PL ERG DEM sheep GEN
 13724 *uu-ku nui ku-kuu-su-ndo.*
 3SG.POSS-head DEM IPFV-GENR:S/O-CAUS-take
 13725 ‘(Every time the adults) sheared the sheep’s wool, they would ask the
 13726 children (us) to grab the sheep’s head.’ (160712 smAG, 2)

14.3.2.6 Double number indexation

13728 The transitive paradigm contains six doubly suffixed forms, two in the local do-
 13729 main, and four in the mixed domain, as summarized in Table 14.12. Japhug is
 13730 not the only Gyalrong language with double number indexation. The same set
 13731 of doubly suffixed forms is found in Tshobdun (Sun & Shidanluo 2002) and Zbu
 13732 (Gong 2014).

13733 The forms corresponding to those in Table 14.12 without additional *-ndzi* or *-nu*
 13734 suffix generally have a singular third or second person argument, for instance *pui-*
 13735 *mto-t-a* ‘I saw him’ (§14.3.2.1) or *pui-kuu-mto-a* ‘You_{sg} saw me.’ (§14.3.2.3). There are
 13736 however also cases of optional number indexation, a topic discussed in §14.6.1.1.

13737 The 1SG→3DU and 1SG→3PL forms have stem III alternation in non-past tenses
 13738 (*mto* → *-mtam-* in Table 14.12) and the suffix *-t* in the Aorist, like the corresponding
 13739 1SG→3SG form (§14.3.2.1).

Table 14.12: Double number indexation in the transitive paradigm

Person	Non-Past	Past
1SG→3DU	<i>mtam-a-ndži</i>	<i>pui-mto-t-a-ndži</i>
1SG→3PL	<i>mtam-a-nuu</i>	<i>pui-mto-t-a-nuu</i>
3DU→1SG	<i>yuu-mto-a-ndži</i>	<i>pú-wy-mto-a-ndži</i>
3PL→1SG	<i>yuu-mto-a-nuu</i>	<i>pui-wy-mto-a-nuu</i>
2DU→1SG	<i>kui-mto-a-ndži</i>	<i>pui-kui-mto-a-ndži</i>
2PL→1SG	<i>kui-mto-a-nuu</i>	<i>pui-kui-mto-a-nuu</i>

13740 Examples (57), (58), (59) illustrate 1SG→3DU (with stem III, *ndza* → *ndze*), 3DU→
 13741 1SG and 2PL→1SG configurations, respectively. All these forms have double suffix-
 13742 ation, comparable to *mtam-a-nuu*, *pú-wy-mto-a-ndži* and *kui-mto-a-nuu* in Table 14.12
 13743 (with the Imperfective instead of the Factual Non-Past).

- 13744 (57) *tu-ndze-a-ndži ra*
 13745 IPFV-eat[III]-1SG-DU be.needed:FACT
 'I'd like to eat them.' (IWlu2002, 69)
- 13746 (58) *tu-kui-numgla-a jyy ma ny-pi ni*
 13747 IPFV-2→1-step.over-1SG be.allowed:FACT LNK 2SG.POSS-elder.sibling DU
kui tý-wy-numgla-a-ndži cti
 ERG AOR-INV-step.over-1SG-DU be.AFF:FACT
 13748 'You can step over me, your two elder sister stepped over me.' (Kunbzang,
 13749 31)
- 13750 (59) *a-pi ra, azuyi kukutcu a-my-ky-cha*
 13751 1SG.POSS-elder.sibling PL 1SG:GEN here 1SG.POSS-NEG-OBJ:PCP-can
ci yyzu tce [...] tu-kui-qur-a-nuu juu-nts^{hi}
 INDEF exist:SENS LNK IPFV-2→1-help-1SG-PL SENS-be.better
 13752 'Sisters, I have a problem (something that I cannot do) here, help me!'
 13753 (150828 donglang, 109)

13754 Double number indexation also occurs on relativized verbs with totalitative
 13755 reduplication (§12.4.1.5), such as *pui~pui-mto-t-a-nuu* in (60). In this example, the
 13756 suffix *-nuu* indexes the number of the object *t^če^heme* 'girl', which is also the head
 13757 of this head-internal relative (§23.4.3). It is redundant with the verb-initial redu-
 13758 plication, which expresses universal quantification of the object.

- 13759 (60) *nunu [t^ce'me pur-pur-mto-t-a-nu]* *u-ŋgu* *nu*
DEM girl TOTAL~AOR-SEE-PST:TR-1SG-PL 3SG.POSS-inside DEM
13760 *kui-fse* *kui-mpcyr* *maje*
SBJ:PCP-be.like SBJ:PCP-be.beautiful not.exist:SENS
13761 ‘This is the most beautiful among all the girls I have ever seen.’ (150818
13762 muzhi guniang-zh, 505)

13763 All forms with double number indexation in Japhug (Table 14.12 and examples
13764 57 to 59 above) contain the first person -a suffix. This includes 1SG→3, 3→1SG
13765 and 2→1SG configurations, but not 1SG→2: the 1→2 forms, unlike other configura-
13766 tion involving a first person, do not take person indexation suffixes coreferent
13767 with their first person subject (§14.3.2.3). Two hypotheses could be proposed to
13768 account for this relationship between -a suffix and double number indexation.

13769 First, this constraint could be seen as a (haplological) prohibition against the
13770 presence of two identical suffixes in the same verb form. Since second and third
13771 person number markers are identical, the only way to express a form such as
13772 2DU→3DU in a fully explicit way would be †Σ₁-ndzi-ndzi with two times the same
13773 suffix, a form which would be excluded by the haplological rule. Such a rule how-
13774 ever would not account for the absence of second number marker in verb forms
13775 suffixed with the 1DU -tci or the 1PL -ji.

13776 Second, it could be argued to be a question of phonology: all person indexation
13777 suffixes apart from -a have the high vowels /i/ or /ɯ/ (which are not contrastive
13778 in this context, §3.5.2), and one could suppose that the ban on double suffixation
13779 in this paradigm is due to a constraint against two unstressed suffixes with high
13780 vowels (since the stress is on the last syllable of the stem, except in a limited
13781 number of cases, §3.7).

13782 However, this hypothesis is contradicted by the fact that other verbal paradigms
13783 in Japhug do contain verb forms with two suffixes in high vowels, as in example
13784 (61).¹⁴

- 13785 (61) *to-k-ylulyt-ndzi-ci*
IFR-PEG-fight-DU-PEG
13786 ‘They fought each other.’

13787 Given the fact that the combination of two unstressed suffixes in high vowel
13788 are possible in Japhug, phonology cannot explain the absence of a form such as
13789 †kui-Σ₁-tci-ndzi (intended for 2DU→1SG).

13790 A third approach to explain the unique properties of the -a suffix, involving
13791 the notion of person hierarchy, is explored in §14.3.2.8.

¹⁴See §15.1.1.2 and §11.4 on the peg circumfix kui-...-ci.

14.3.2.7 The allomorphy of the inverse prefix

The inverse prefix¹⁵ has the allomorph *yú-* when occurring in word-initial position, something which is only possible in the Factual Non-Past (as it is the only TAME category without any orientation preverb, §21.3.1.1) when no other inflectional prefix is present. It surfaces as *wy-* in all other cases, merging with the vowel of the preceding prefix, which then bears the accent; the inverse is one of the very few stress-attracting prefixes in Japhug (§11.2.3).

The allomorph *wy-* also occurs in Factual Non-Past forms with the following prefixes:

- Second person *tua-* (§14.3.2.1): *tú-wy-mto* (2-INV-see:FACT) ‘he will see you’
- Negative *mx-* (§13.1.1): *má-wy-mto-a* (NEG-INV-see:FACT-1SG) ‘he will not see me’
- Apprehensive *cuu-* (§21.7.1): *cuú-wy-mtsuy-a* (APPR-INV-bite:FACT-1SG) ‘(I fear) that it could bite me’
- Associated motion *cuu-/yuu-* (§15.2): *yú-wy-ndza-j* (CISL-INV-eat:FACT-1PL) ‘it will come to eat us’
- Proximative aspect: *juu-* (§21.6.2) *juú-wy-mtsuy-a* PROXM-INV-bite:FACT-1SG ‘it is about to bite me’
- Possible modality: *umw-* (§21.7.2) *umwá-wy-mtsuy-a* (PROB-INV-bite:FACT-1SG) ‘it will perhaps bite me’ (88b, §10.4.4)
- Rhetorical Interrogative: *uþrꝫ-* (§21.7.3.1) *uþrꝫ-wy-mtsuy-a* (RH.Q-INV-bite:FACT-1SG) ‘it will not bite me, will it?’
- Interrogative: *u-* (§21.7.4.1) *ú-wy-ndza-a* (QU-INV-eat:FACT-1SG) ‘Will it eat me?’

With the progressive prefix *asu-* (§21.6.1.1), the inverse is *infixed* rather than being prefixed, for instance in a form such as *jnu-tuu-ꝫ<wy>suu-zgrob* (SENS-2-PROG<INV>-attach) ‘he is attaching you’. This question is discussed in more detail in §11.2.1.

The merger of the /w/ of the inverse prefix with the vowels /u/ and /ꝫ/ of the preceding prefixes yields /u/ and /o/, respectively. Although the transcription

¹⁵The possible origins of the inverse prefix are discussed in §5.1.1.5 and §14.8.2.

13822 -*wy*- is chosen in the present orthography, the fricative /ɣ/ is most often elided,
 13823 and the stress and vowel rounding are the main clues of the presence of the
 13824 inverse prefix.

13825 Due to the vowel merger, the contrasts between several series of prefixes
 13826 are neutralized when preceding the inverse prefix, causing homophony between
 13827 morphologically different forms (our orthography however keeps the distinction
 13828 between the rounded and unrounded vowels in this context). There are potential
 13829 ambiguities in three situations.

13830 First, since the B-type (imperfective) UPWARDS preverb *tu-* (§15.1.1.1) and the
 13831 second person *tu-* (§14.2.1.2) both become neutralized as *tú-* before the inverse
 13832 prefix, transitive verbs whose intrinsic orientation is UPWARDS (§15.1.5) have the
 13833 same surface form in the Imperfective 3'→3 (and also 3SG→1SG with verbs whose
 13834 stem ends in *-a*, due to vowel merger, see §3.3.1.3 and §14.2.1.1) on the one hand
 13835 and the Factual Non-Past 3→2SG on the other hand. The two examples in (62) il-
 13836 lustrate this ambiguity with the verb *ndza* ‘eat’ (which selects the orientation UP-
 13837 WARDS, §15.1.5.4) with the Factual Non-Past 3→2SG *tú-wy-ndza* ‘it will eat you’ in
 13838 (62a) and the Imperfective *tú-wy-ndza-a* 3SG→1SG ‘it eats me’,¹⁶ both pronounced
 13839 /túyndza/ in two immediately adjacent sentences in the same text.

- 13840 (62) a. *βdtut a-my-jy-zyuit ra ma tú-wy-ndza*
 demon IRR-NEG-PFV-arrive be.needed:FACT LNK 2-INV-eat:FACT
 13841 (She said) ‘(Let us hope that) the demon will not arrive, otherwise it
 13842 will eat you.’ (tWxtsa2003, 31)
- 13843 b. *tú-wy-ndza-a nua my-jy* *nýma nyzo*
 IPFV-INV-eat-1SG DEM NEG-be.allowed:FACT SFP 2SG
 13844 *ny-ndza pui-ye-a cti tce*
 2SG.POSS-reason AOR:DOWN-come[II]-1SG be.AFF:FACT LNK
 13845 ‘(The demon cannot) eat me, I came for you (to save you).’
 13846 (tWxtsa2003, 32)

13847 In addition to the meaning difference, the ambiguity between the two prefixes
 13848 can sometimes be resolved by the syntactic context alone. For instance, the verb
 13849 *stu* ‘do like’ often occurs with another transitive verb in a serial verb construction
 13850 (§25.4.1.2) sharing the same person and tense. If the other verb in the construc-
 13851 tion does not select the orientation UPWARDS, its Imperfective 3'→3 (or generic
 13852 subject) and Factual 3→2SG will not be homophonous.

¹⁶For the use of the Imperfective in subject complement clause of the verb *jy* ‘be allowed’, see §21.2.4.

For instance, in (63a), since *nuc^hymda* ‘drink with a straw’ selects the orientation DOWNSTREAM (§15.1.5.4, example 73), its Imperfective 3'→3 would be *c^hú-wy-nuc^hymda*; the form *tú-wy-nuc^hymda* is thus unambiguous, and suffices to demonstrate that the surface form /tú(y)stu/ in this context is really a 3→2SG form *tú-wy-stu* and not a 3'→3 Imperfective *tú-wy-stu*, even without considering the meaning of the sentence.

Conversely, in (63b), the second verb *pú-wy-cuu* is unambiguously a generic Imperfective form, since there is no prefix with which the rounded allomorph of the B-type WESTWARDS preverb *nuu-* could be confused; the form /tú(y)stu/ in this sentence must therefore necessarily be analyzed as a generic Imperfective *tú-wy-stu*.

- (63) a. *t^hu-tui-rgyz tce ki tú-wy-stu*
 AOR-2-be.old LNK DEM.PROX 2-INV-do.like:FACT
 tú-wy-nuc^hymda cti tce,
 2-INV-drink.with.a.straw:FACT be.AFF:FACT LNK
 ‘When you become old, they will drink you (your blood) like this
 with a straw (planted on your back)’ (Norbzang 2012, 67)
- b. *ki tú-wy-stu tce pú-wy-cuu*
 DEM.PROX IPFV-INV-do.like LNK IPFV-INV-open
 ‘One opens it like this.’ (26-tCAkWG, 19)

Second, the A-type preverbs *tr-* UPWARDS, *ly-* UPSTREAM, *ky-* EASTWARDS and *jy-* and the corresponding D-type preverbs *to-*, *lo-*, *ko-* and *jo-* (§15.1.1) are neutralized before the inverse prefix. This implies that the Aorist (§21.5.1.1) and Inferential (§21.5.2.1) of verbs selecting the orientations listed above will be homophonous in all forms bearing the inverse prefix.

In (64a), the 3'→3 form /tó(y)sulxt/ could either be Inferential *tó-wy-su-lxt* with the D-type preverb *to-* or Aorist *tr^h-wy-su-lxt* with the A-type preverb *tr-*. Here, the context can help to disambiguate between the two: the former is preferred because the whole story is told in the Inferential, and using the Aorist in this particular context would imply taking the event described by the verb as a reference point (§21.5.1.4), with a different translation ‘when the horse...’. In (64b) on the other hand, the presence of the postposition *çimuma* ‘immediately after’ (§25.3.3.2) and the meaning of the sentence imply that the form /tó(y)xtu/ must be analyzed as Aorist rather than Inferential.

- 13884 (64) a. *χsur-ttxuar zo tó-wy-sur-lxt tce t̪-βju*
 three-turn EMPH IPFV-INV-CAUS-release LNK INDEF.POSS-mat
 13885 *uu-tas tce pj̪-wy-βde.*
 3SG.POSS-on LOC IFR-INV-throw
 13886 ‘She made the (horse) run three laps and throw her on the mat.’
 13887 (2003kAndzwsqhaj2, 88)
- 13888 b. *koxteun-ri nunuu t̪-wy-χtua cimuma cry nurā*
 silk-thread DEM AOR-INV-buy immediately be.new:FACT DEM:PL
 13889 *wuma nuu-mpcyr ri,*
 really SENS-be.beautiful LNK
 13890 ‘Silk threads are very beautiful when one has just bought them, when
 13891 they are new.’ (2002thaXtsa, 167)

13892 Third, the contrast between the Proximate *ju-* (§21.6.2) and the B-type *ju-*
 13893 preverb is also neutralized when preceding the inverse prefix. For instance, the
 13894 Proximate Factual 3→1SG *jú-wy-qaβ-a* PROXM-INV-catch.up-1SG ‘it is about to
 13895 catch up with me’ and the Imperfective *jú-wy-qaβ-a* IPFV-INV-catch.up-1SG are ho-
 13896 mophonous, since the verb *qaβ* ‘catch up’ is compatible the indefinite orientation
 13897 *ju-* (§21.6.2).

13898 14.3.2.8 Direction marking and person hierarchies

13899 The mixed and non-local domains of the Japhug indexation system present a
 13900 remarkable symmetry, illustrated in Table 14.13: direct X→3 and inverse 3→X
 13901 forms have the same person indexation affixes, and only differ by the presence
 13902 of the prefix *wy-* in inverse configurations, and of stem III in (Non-Past) XSG→3
 13903 configurations.

Table 14.13: Symmetrical indexation

Person	Direct (X→3)	Inverse (3→X)
1SG	<i>mtam-a</i>	<i>yú-mto-a</i>
1DU	<i>mto-tći</i>	<i>yú-mto-tći</i>
1PL	<i>mto-j</i>	<i>yú-mto-j</i>
2SG	<i>tui-mtym</i>	<i>tú-wy-mto</i>
2DU	<i>tui-mto-ndži</i>	<i>tú-wy-mto-ndži</i>
2PL	<i>tui-mto-nuu</i>	<i>tú-wy-mto-nuu</i>
3SG	<i>mtym</i>	<i>yú-mto</i>
3DU	<i>mto-ndži</i>	<i>yú-mto-ndži</i>
3PL	<i>mto-nuu</i>	<i>yú-mto-nuu</i>

13904 Although this symmetry is broken in the local domain, where neither the *wy*-
 13905 prefix nor stem III alternation occur (§14.3.2.3), Japhug has an indexation system
 13906 very close to the canonical direct-inverse, as presented in Table 14.14 (Jacques &
 13907 Antonov 2014): all configurations of the lower half of the bipersonal indexation
 13908 space except 2→1 take the *wy-* prefix, while this prefix is not found in the upper
 13909 half.

Table 14.14: The canonical direct/inverse system

	1	2	3	3'
1		1→2	1→3	
2	2→1		2→3	
3	3→1	3→2		3→3'
3'			3'→3	

13910 As mentioned above, person indexation affixes in Japhug have neutral align-
 13911 ment, and can be used to index either subjects (of transitive or intransitive verbs)
 13912 or objects. With transitive verbs, the *wy-* prefix (whose allomorphy is described
 13913 in §14.3.2.7) and Stem III (§12.2.2) serve to disambiguate the function of the inde-
 13914 xation affixes closest to the verb stem:¹⁷ if the *wy-* prefix is present, the affix(es)
 13915 index the object, while if Stem III is present, they index the subject. The *wy-* prefix
 13916 and stem III mark *inverse* and *direct* configurations, respectively.

¹⁷If two indexation suffixes are present, the second suffix indexes the number of the other argu-
 ment (§14.3.2.6).

13917 A way to describe the distribution of the inverse and direct markers is the
 13918 notion of person or empathy hierarchy (Silverstein 1976; DeLancey 1981; Sun &
 13919 Shidanluo 2002; Lockwood & Macauley 2012). A typical example of person hier-
 13920 archy is (65), on which first person ranks higher than second person, discourse
 13921 participants (first of second persons) higher than third persons,¹⁸ and among an-
 13922 imate third persons (in particular humans) higher than inanimate third persons.

13923 (65) 1 > 2 > 3 animate > 3 inanimate

13924 This type of hierarchies,¹⁹ originally proposed to account for splits in pronomi-
 13925 nal systems (Silverstein 1976), have been invoked to explain various morphosyn-
 13926 tactic phenomena, including slot accessibility (for instance, the prefixal slot in
 13927 the Independent Order paradigms of Algonquian languages, Zúñiga 2006; Lock-
 13928 wood & Macauley 2012) and direct/inverse marking.

13929 In this framework, when the subject and the object compete for the same mor-
 13930 phological slot, the one that is higher on the hierarchy is indexed. In addition,
 13931 INVERSE markers occur when the *object* is higher on the hierarchy than the sub-
 13932 ject (2→1, 3→1, 3→2), and DIRECT markers when the *subject* is higher (1→2, 1→3,
 13933 2→3).

13934 The explanatory power of hierarchies to analyze indexation systems has been
 13935 challenged (Zúñiga & Cristofaro 2018), in particular due to the fact that in some
 13936 languages one would need to posit contradictory hierarchies (see Zúñiga's 2006
 13937 discussion of Plains Cree).

13938 Independently of the cross-linguistic validity of the notion of person hierar-
 13939 chies, the Japhug indexation system is amenable to an analysis in terms of the
 13940 two non-contradictory hierarchies in (66). The nature of the contrast between 3
 13941 proximate and 3' obviative is discussed in §14.3.3.

13942 (66) a. 1, 2 > 3PROX > 3', GENR

13943 b. 1SG > 1N.SG, 2, 3

13944 Hierarchy (66a) describes the distribution of the inverse *wy-* prefix and Stem
 13945 III in the mixed and non-local domains:

- 13946 • The inverse prefix occurs whenever the subject is lower than the object
 13947 (3→1, 3→2, 3'→3), a rule that also accounts for its function to mark the
 13948 generic transitive subject GENR→3 (§14.3.2.5).

¹⁸On the difference between third person on the one hand, and first and second persons on the other hand, see also Benveniste (1966b: 253–256).

¹⁹Other hierarchies have been suggested; for instance, slot accessibility in most Algonquian lan-
 guages requires to posit a hierarchy 2 > 1 > 3.

- Stem III is found when the subject is singular and higher than the object (1SG→3, 2SG→3, 3SG→3').
- Neither the inverse prefix nor Stem III are found when the subject and the object are equal on (66a), in particular in the local domain (2→1, 1→2), where portmanteau prefixes occur to indicate person configuration (§14.3.2.3), and the suffix closest to the verb stem indexes the object. Generic object configurations, which are marked with the *kua-* generic prefix and lack Stem III (§14.3.2.5), are analyzed as 3'→GENR, as third person obviative and generic are equal on (66a).

Additional evidence for the existence of (66a) is presented in §14.4.3.

Hierarchy (66b) accounts for the special status of the 1SG: whenever one of the core arguments is 1SG, the number of the other argument is indexed on the verb. In 2→1SG, 3→1SG and 1SG→3 configurations, an additional suffix can follow the -a 1SG to index the number of the third or second person argument (§14.3.2.6). In the 1SG→2 configurations, the suffix is coreferent with the number of the object like all forms in the local domain (§14.3.2.3).

The hierarchies in (66) are only valid for Japhug. In other Gyalrong languages, including Situ (DeLancey 1981; Sun 2015; Zhang 2019), Tshobdun (Sun & Shidanluo 2002) and Zbu (Gong 2014), the inverse prefix is also found in the 2→1 configuration and does not appear in the generic subject form, suggesting a hierarchy closer to (65).

A different approach to explain the structure of the Japhug direct-inverse indexation system is to analyze it in terms of historical linguistics. Some preliminary ideas on the topic are presented in §14.8.1 and §14.8.3.

14.3.3 The function of the direct/inverse contrast in non-local configurations

Like most Gyalrong languages, including Tshobdun (Sun & Shidanluo 2002), Zbu (Gong 2014), but excluding West Gyalrongic (Lai 2015) and some dialects of Situ (Sun 2015; Zhang 2019), Japhug has a contrast between inverse and direct forms in the non-local configurations.

The clearest function of the inverse prefix in this context in Japhug is marking generic subject (§14.3.2.5). In non-generic forms, the choice of inverse or direct configurations is determined by several factors, including animacy, possession and saliency of the core arguments.

Japhug lacks obviative marking on nouns (§5.1.1.3), but in the present work I use the terms ‘obviative’ (abbreviated as 3') to refer to the third person *object*

of a verb in direct non-local configuration or to the third person *subject* of a transitive verb with inverse configuration, and ‘proximate’ (3) for the subject of a verb in direct form or object of a verb in inverse form (the choice of these terms is discussed in §14.3.2.2).

14.3.3.1 Animacy

The clearest factor determining the proximate or obviative status of a noun phrase in Japhug is animacy. Whenever one of the core arguments (whether a noun phrase or a clause) is inanimate and the other animate, the former will almost always be obviative, and the latter proximate.

When the subject is animate and the object inanimate (with the exception of generic subjects §14.3.2.5 and pseudo-passive constructions §14.3.3.4), the verb must be in direct form. Thus, indirective verbs of speech (§14.4.1) such as *ti* ‘say’, or transitive modal verbs such as *spa* ‘be able’ (§24.5.3.4), whose object is always a complement clause (or an abstract noun for some of these verbs),²⁰ and whose subject is necessarily human or higher animal, will always have a proximate subject and an obviative object (3→3’), and thus never appear in (non-generic) inverse configurations.

Conversely, in nearly all the cases when the subject is an inanimate entity (including plants) and the object an animate one (including humans and non-human animals), the verb appears in inverse form, as illustrated by examples (67), (69) and (68).

Inanimate agents are usually natural forces, such as *tui-ci* ‘water’ (subject of *cʰy-wy-yut* ‘it brings her downstream’ in 67) or *tui-muu* ‘the rain’ (subject of the verb *pjú-wy-χtci-nu* ‘(they) wash them away’ in 69).

- 14009 (67) *tupnyt tʰu-ye* *nua ua-rca* *nutceu*
 landslide AOR:DOWNTSTREAM-come[II] DEM 3SG.POSS-following DEM:LOC
 14010 *tce, nuŋa puŋ-kua-nuruu* *nua tyrca*
 LOC COW PST.IPFV-SBJ:PCP-eat.grass DEM together
 14011 *cʰy-wy-yut,* *tui-rdor.* *tce nuunu*
 IFR:DOWNTSTREAM-INV-bring one-piece, LNK DEM
 14012 *cʰy-wy-yut* *tcendyre icqʰa* *nua, nyki*
 IFR:DOWNTSTREAM-INV-bring LNK FILLER DEM FILLER

²⁰Complement clauses, being inanimate arguments, are always obviative when used as objects of complement-taking verbs.

- 14013 *tuu-ci* *kua cʰy-wy-yuit* *qʰe*
 INDEF.POSS-water ERG IFR:DOWNSTREAM-INV-bring LNK
 14014 ‘There was a landslide, and together with it, a grazing cow was taken
 14015 away, the water took it away.’ (160715 nWNa, 5-6)
- 14016 Plants can also be agents of verbs with animate patients, as in (§68). In this
 14017 example, note the inversion between the subject and object of the first verb (*tu-*
 14018 *ndze*, whose subject is the dog and object the plant) and those of the second verb
 14019 (*lú-wy-su-qioꝝ*, whose subject (causer) is the plant and object the dog).
- 14020 (68) *p̥yŋyxcaj nrki, kʰuma kua tu-ndze tce lú-wy-su-qioꝝ*
 plant.sp. FILLER dog ERG IPFV-eat[III] LNK IPFV-INV-CAUS-vomit
 14021 *juu-ŋu.*
 SENS-be
 14022 ‘(The plantcalled) *p̥yŋyxcaj*, when a dog_j eats it_i, it makes it_j vomit.’
 14023 (140505 panaxCAj, 3)
- 14024 There are also cases when inert substances (such as as soot in 69) can be agents.
 14025 Indeed, in (69), soot is the non-overt subject of the verb *ŋí-wy-suŋ-ŋaŋ-nu* ‘it
 14026 caused them to become black’. In such cases the inanimate argument is always
 14027 obviative, and inverse marking on the verb is required.
- 14028 (69) <*yancong> w-ŋgwu juu-ŋaŋ rcanu, tce kumpyxtci ra*
 chimney 3SG-inside IPFV-be.black UNEXP:DEG LNK sparrow PL
 14029 *ŋí-wy-suŋ-ŋaŋ-nu zo, nuu-kui-ŋkʰra ra*
 IFR-INV-CAUS-be.black-PL EMPH 3PL.POSS-NMLZ:S/A-be.colourful PL
 14030 *muu-ŋy-χsyl zo tcendyre zuruuzri qale tu-βze,*
 NEG-IFR-be.clear EMPH LNK progressively wind IPFV-make[III]
 14031 *tuamuu kua p̥jú-wy-χtci-nu tce juu-me juu-ŋu*
 INDEF.POSS-weather ERG IPFV-INV-wash-PL LNK IPFV-not.exist SENS-be
 14032 ‘As it is black inside the chimney, the sparrows were completely
 14033 blackened by it, the patterns and colours (on their feathers) were not
 14034 visible any more, but progressively, the wind and the rain wash them
 14035 away and (the soot on their feathers) disappears.’ (22-kumpGatCW, 74-76)
- 14036 Natural forces appear to be intermediate between inanimates and animates, as
 14037 counterexamples without inverse marking do exist. In (70) for instance, the verb
 14038 *tʰa-nu-tsum* ‘it took them downstream’ has *tu-ci* ‘water’ as subject and the ani-
 14039 mate noun *βz̥u ra* ‘the mice’ as object, but a direct configuration 3→3’ is selected.
 14040 However, only a handful of examples of this type are found in the corpus, and
 14041 inverse marking would normally be expected.

- 14042 (70) *cuarmbuu u-tab nuu nuu-z-ryzi jy-me ma*
 stone.heap 3SG.POSS-on DEM 3PL.POSS-NMLZ:OBL-stay IFR-not.exist LNK
 14043 *tuu-ci to-yi q^he, tcendyre nyki βzui ra kysufse*
 INDEF.POSS-water IFR:UP-COME LNK LNK FILLER mouse PL all
 14044 *t^ha-nuu-tsum. q^he puu-si-nuu.*
 AOR:DOWNTSTREAM:3→3'-AUTO-take.away LNK AOR-die-PL
 14045 'The place where they_j stayed on the stone heap disappeared as the
 14046 water_i came up, and it_i took the mice_j downstream. And they_j died.
 14047 (150831 BZW kAnArRaR, 95)

14048 When both core arguments have third person animate referents, both direct
 14049 (71) and inverse (72) configurations are possible, even when the subject is non-
 14050 human and the object human.

- 14051 (71) *ndzi-sytc^ha nuunu yuu juul nuunu rcanuu k^hu kuu lonba*
 3DU.POSS-place TOP GEN villager DEM UNEXP:FOC tiger ERG all
 14052 *zo t^ha-ckut puu-ηu*
 EMPH AOR:3→3'-eat SEN-be
 14053 'All the villagers in their land had been eaten by a tiger.' (khu2005, 5)
- 14054 (72) "mts^ho^hlay ni a-k^hykum, nyki, a-k^huna zo
 water.monster DU 1SG.POSS-doorstep FILLER 1SG.POSS-dog EMPH
 14055 *a-puu-fse-ndzi ra" to-ti puu-ηu tce mts^ho^hlay*
 IRR-IPFV-be.like-DU be.needed:FACT IFR-say SENS-be LNK water.monster
 14056 *ni kuu pjy-wy-nyliylist zo cti*
 DU ERG IFR-INV-greet.like.a.dog EMPH be.AFF:FACT
 14057 'He said 'May the water monsters be like dogs on my doorstep' and the
 14058 water monsters greeted him like dogs.' (Norbzang 2012, 205-206)

14059 When both core arguments are inanimate, the verb is generally in direct form,
 14060 including in the case of inanimate objects acting on body parts of animate beings,
 14061 as in (73) or (74).²¹

- 14062 (73) *uu-mp^huuz nuunu txypyom kuu pjy-ndo q^hendyre,*
 3SG.POSS-buttocks DEM ice ERG IFR-take LNK
 14063 'His buttocks were stuck on the ice.' (140427 qala cho kWrtsAG, 37)

²¹Example (74) is a particularly convoluted type of unmarked embedded clause (§25.1.4), as the ergative phrase *ryylpu nuu kuu* 'the king' is not subject of the immediately following transitive verb *jy-z-nymbyju*.

- 14064 (74) *rjylpu nuu kuu [u-mnab p̪y-z-nymbju] zo pjy-mto tce,*
 king DEM ERG 3SG.POSS-eye IFR-CAUS-be.bright EMPH IFR-see LNK
 14065 ‘The king_j saw it (the thread)_i as it_i dazzled his_j eyes.’ (2012 Norbzang,
 14066 151-152)

14067 Inverse forms can occur when the object is the most salient of the two inani-
 14068 mate arguments (§14.3.3.3), as in (75), where both the subject and the object of
 14069 the verb *nú-wy-z-maq^hu* ‘it makes it late’ are plants.

- 14070 (75) *u-rkuu nutcu, si kuu-wxti a-pui-tu tce*
 3DU.POSS-side DEM:LOC tree SBJ:PCP-be.big IRR-IPFV-exist LNK
 14071 *nú-wy-z-maq^hu q^be uzo tu-mbro māj-c^ha.*
 IPFV-INV-CAUS-be.after LNK 3SG IPFV-be.big NEG:SENS-can
 14072 ‘If there is a big tree_j next to it_i, it_j delays its_i growth and it_i cannot grow
 14073 very big.’ (14-sWNgWJu, 242)

14.3.3.2 Possession and obviation

14074 In Algonquian languages, there are two main constraints governing the use of
 14075 obviation on nouns: on the other hand, third persons possessed by another third
 14076 person are automatically obviative (Wolfart 1973: 25, Valentine 2001: 625), and
 14077 on the other hand, at most one argument can be proximate in any given clause
 14078 (Valentine 2001: 627). A consequence of these constraints is that whenever a trans-
 14079 itive verb takes as subject a possessed noun, and as object a (proximate) noun
 14080 coreferent with the possessor of the subject,²² the verb will necessarily have an
 14081 inverse form, as in the Cree example in (76). Conversely, if the subject is a prox-
 14082 imate noun and the object a possessed noun whose possessor is coreferent with
 14083 the subject, the verb will necessarily be direct.

- 14084 (76) *cān o-tēm-a kī-mākwam-ik*
 ANTHR 3SG.POSS-dog-OBV PST-bit-INV
 14085 ‘John_{prox}’s dog_{obv} bit him_{prox}.’ (Wolfart 1973: 25)

14086 Though similar phenomena have been reported outside of Algonquian (Aissen
 14087 1997), not all languages with direct-inverse indexation display such relationship
 14088 between possession and obviation (Haude & Zúñiga 2016).

²²If the object noun is not co-referent with the possessor of the subject, it will be obviative too due to the second constrain.

14090 Japhug lacks obviation marking on nouns (§5.1.1.3), but the presence of direct
 14091 or inverse morphology can nevertheless be used to test whether possession has
 14092 an effect on the obviation status of nominal arguments.

14093 There is a very clear tendency for inverse marking to occur when the subject is
 14094 a possessed noun and the object its possessor (henceforth SPO ‘subject possessed
 14095 by third person object’), as shown by examples such as (77), (78) and (79).

- 14096 (77) *a-wa ui-yi ra nui-cki kó-wy-ndzui, [...]*
 14097 1SG.POSS-father 3SG.POSS-relative PL 3PL.POSS-DAT IFR-INV-accuse

14098 *tcendyre a-wa ui-yi ra kui tó-wy-nymqe*
 14099 LNK 1SG.POSS-father 3SG.POSS-relative PL ERG IFR-INV-scold

14100 ‘(The old monk) complained about my father_i to his_i parents, and my
 14101 father_i’s parents scolded him.’ (08-kWqhi, 19)

- 14102 (78) *tce ui-pi bnuz numi kumy mu-pjý-wy-suŋsy*
 14103 LNK 3SG.POSS-elder.sibling two DEM:DU also NEG-IFR-recognize
 14104 ‘Even her_i two elder sisters did not recognize her_i.’ (140504
 14105 huiguniang-zh, 120)

- 14106 (79) *tcendyre rjylpu yuu ui-rzaβ jny-k-γβzu-ci tce, tce*
 14107 LNK king GEN 3SG.POSS-wife IFR-PEG-become-PEG LNK LNK
 14108 *ui-pi ni kui wuma zo, nykinu, pjý-wy-nyzymjyn*
 14109 3SG.POSS-elder.sibling DU ERG really EMPH FILLER IFR.IPFV-INV-envy
 14110 ‘She_i became the queen, and her_i sisters were envious of her_i.’ (140514
 14111 huishuohua de niao-zh, 15)

14112 However, the fact that a correlation between inverse marking and SPO config-
 14113 urations exists does not necessarily imply that the inverse is actually triggered
 14114 by SPO.

14115 First, there are also many examples of SPO with direct marking. For instance,
 14116 in (80), the verbs *nui-z-nxja-ndzi* and *mu-ta-su-ye-ndzi* with SPO lack inverse pre-
 14117 fixes and have direct morphology (subject number indexation §14.3.2.2 and the
 14118 C-type orientation preverb *ta-*, §14.3.1). In addition, the examples (8) and (9) in
 14119 §5.1.1.3 provide a minimal of SPO configuration with direct vs. inverse configu-
 14120 ration in exactly the same context.

- 14121 (80) *tc^heme wuma zo kui-pe ci pui-ŋu q^he,*
 14122 girl really EMPH SBJ:PCP-be.good INDEF PST.IPFV-be LNK
 14123 *ui-mu ui-wa ni kui nui-z-nxja-ndzi*
 14124 3SG.POSS-mother 3SG.POSS-father DU ERG SENS-CAUS-be.regrettable-DU

- 14118 *q^he muu-ta-sur-ye-ndzi,*
 LNK NEG-AOR:3→3'-CAUS-come[II]-DU
 14119 '(His wife)_i was a very nice girl, her_i parents were unwilling to part with
 14120 her_i and did not let her_i come.' (14-siblings, 304)

14121 Second, the presence of inverse marking in examples (77), (78) and (79) above
 14122 (and in most cases of SPO with inverse) can be accounted for by factors other
 14123 than possession, in particular the relative saliency of the subject and the object
 14124 (§14.3.3.3): in all three examples, the object corresponds to the main character
 14125 of the story; notice in particular in (77) the presence of inverse marking on the
 14126 previous verb *kó-wy-ndzu* 'he complained about him', which does not have SPO.

14127 In stories, non-salient characters tend to be described on the basis of their
 14128 relationship with a salient character (rather than by a different name), and are
 14129 therefore expressed by nouns with third person possessor. Many, if not most SPO
 14130 configurations in the corpus involve non-salient referents acting upon salient ref-
 14131 erents related to them; the apparent correlation between SPO and inverse mark-
 14132 ing in texts may therefore be a side-effect of argument saliency rather than a
 14133 specific morphosyntactic phenomenon.

14134 14.3.3.3 Saliency

14135 When both core arguments are third person animate, both are potentially prox-
 14136 imate or obviative, and the verb can thus be either in direct or inverse form, and
 14137 the choice between one or the other is determined, as we will discuss in this
 14138 section, by pragmatics. In this section, I mainly focus on human or anthropo-
 14139 morphized non-human referents; animals are briefly treated at the end of the
 14140 section.

14141 Transitive verb forms where such a choice between inverse and direct forms
 14142 exist are however a minority. For instance, in (81), the verbs *to-ti* 'she said', *to-nuu-*
 14143 *yga* 'she wore it' and *ko-rqor* 'he hugged (her neck)' are in the direct form due to
 14144 animacy constraints (since the subjects of all three verbs are animate and their
 14145 object inanimates, see §14.3.3.1). Note that a subject shift takes place between *to-*
 14146 *nuu-yga* 'she wore it' and *ko-rqor* 'he hugged (her neck)' without inverse marking.

14147 The only verb in this passage taking two animate referents is *tó-wy-tsum* 'she
 14148 took him up', whose subject is *stu kuu-xtqi nuu* 'the smallest (of the daughters of
 14149 heaven)' and whose object is a human boy.²³

²³ Compare example (81), where this referent is in 3SG, with (126) in §7.5.2 and (105) in §9.1.5.3, where it appears in 1SG.

- 14150 (81) *stu kur-xtci nuu kuu ‘...’ to-ti tcendyre qro numuu*
 most SBJ:PCP-be.small DEM ERG IFR-say LNK pigeon DEM
 14151 *wu-ŋga nuu to-nui-ŋga qʰe, tce nuu wu-mke*
 3SG.POSS-clothes TOP IFR-AUTO-wear LNK LNK DEM 3SG.POSS-neck
 14152 *ko-rqob qʰe tcendyre tó-wy-tsum to-nuqambumbjom qʰe*
 IFR-hug LNK LNK IFR-INV-take.away IFR:UP-fly LNK
 14153 ‘The smallest (daughter)_i said ‘...’, she_i wore the pigeon skin, he_j hugged
 14154 her_i neck, and she_i took him_j and flew away (with him).’ (07-deluge, 61-70)

14155 The presence of inverse marking on *tó-wy-tsum* ‘she took him up’ in (81) is
 14156 neither due to semantic nor syntactic factors. Rather, animate (in particular, hu-
 14157 man/sentient) referents in a particular passage (the subsection of a story, or a
 14158 complete) are classified along a scale of obviativity. The main character(s) is/are
 14159 ascribed proximate status, while characters which the narrator considers to be
 14160 more secondary receive obviative status.

14161 Example (81) is taken from a flood story whose main character is a human
 14162 boy (the only survivor of the flood). This character remains proximate in the
 14163 whole story, and thus by comparison, the daughter of heaven (the other charac-
 14164 ter found in the passage in 81) is obviative. The proximate/obviative contrast
 14165 on these animate referents is not visible when they occur as subjects with inani-
 14166 mate objects: the inanimate referents are necessarily always more obviative than
 14167 any animate referent, and therefore direct forms are found. This contrast is only
 14168 revealed when a verb takes two animate referents, namely the verb *tó-wy-tsum*.
 14169 The apparent shift between direct and inverse forms found in (81) is not an effect
 14170 of the animate referent changing their obviation status across sentences, but is
 14171 rather a consequence of the fact that Gyalrong languages lack a special conju-
 14172 gation class used with inanimate objects, such as the VTI (transitive inanimate)
 14173 verbs in Algonquian.

14174 The scale of obviation (82) accounts for the distribution of direct and inverse
 14175 marking in (81) (and in the rest of the story): direct marking is found when the
 14176 subject is higher than the object on the scale, and inverse marking when it is
 14177 lower.

- 14178 (82) human boy > daughter of heaven_i > inanimate referents (*qro wu-ŋga* ‘pigeon
 14179 clothes’; *wu-mke* ‘her_i neck’)

14180 The degree of obviativity of each referent, while generally stable within a par-
 14181 ticular passage, can be fluid in longer narratives. For instance, in the story ‘Nor-
 14182 bzang and Padma ’Od’bar’, the analysis of direct vs. inverse forms reveals several
 14183 scales.

14184 In (83), the subject is the king and the object the character Padma 'Od'bar, and
 14185 inverse marking indicates that the latter is proximate.

- 14186 (83) *kuacnua-sni kuacny-rzaab nú-wy-z-nvbaab* *nui-ηu.*
 seven-day seven-night IPFV-INV-CAUS-have.a.good.time SENS-be
 14187 'The king) let (Padma 'Od'bar) have a good time for seven days and
 14188 seven nights.' (Norbzang 2005, 202)

14189 Examples (84) and (85) have the secundative verbs *pa-suixcrt* 'he taught (it)
 14190 to them' (§14.4.2) and *nú-wy-çua-rño-nuu* 'he lent it to them' (§14.4.3) in direct
 14191 and inverse forms, respectively. From these examples, one could further propose
 14192 the scale (86) showing the relative obviativity of the three groups of characters
 14193 (Padma 'Od'bar, the three girls, and the king).

- 14194 (84) *ty-tcuu* *nui kui, [...] nuunu tc^heeme χsum nui lonba*
 INDEF.POSS-boy DEM ERG DEM girl three dem all
 14195 *pa-suixcrt* *nui-ηu.*
 AOR:3→3'-teach SENS-be
 14196 'The boy (Padma 'Od'bar) taught the whole (mantra) to the three girls.'
 14197 (Norbzang 2005, 380; Padma 'Od'bar > girls)
- 14198 (85) *tcendyre "jyy"* *ti* *ny χsyrzaj nút-wy-cuu-rño-nuu*
 LNK be.possible:FACT say:FACT LNK artefact AOR-INV-CAUS-borrow
 14199 *nui-ηu.*
 SENS-be
 14200 'The king) said 'yes' and lent the Gserbzang to (the three
 14201 girls).' (Norbzang 2005, 406; girls > king)

- 14202 (86) Padma 'Od'bar > girls > King

14203 However, while (86) is indeed valid in some sections of the story, we also find
 14204 examples such as (87) and (88) with a verb in direct form, despite the fact that
 14205 the subject (the king) is lower on the scale (86) than the object (Padma 'Od'bar):
 14206 an inverse configuration would be expected.

- 14207 (87) *tcendyre rjylpu kui na-nusñom* *nui-ηu.*
 LNK king ERG AOR:3→3'-envy SENS-be
 14208 'The king envied (Padma 'Od'bar).' (Norbzang 2005, 374)

- 14209 (88) *tcendyre t̥et̥u nd̥re, p̥nmawombyr ka-tc̥yβ-nu* *n̥u-ŋu.*
 LNK up.there LNK ANTHR AOR:3→3'-burn-PL SENS-be
 14210 '(The king and his servants) burned Padma 'Od'bar up there.' (Norbzang
 14211 2005, 389)

14212 In (87) and (88), a different scale (89) has to be posited.

- 14213 (89) King > Padma 'Od'bar

14214 Thus, a particular character of this story (the king), which has obviative sta-
 14215 tus in (83) and (85), becomes proximate in (87) and (88), in a passage where he
 14216 temporarily becomes the 'main character'.

14217 Within each of the scenes of a narrative, the obviativity status of each referent
 14218 generally remains stable. Thus, in chains of verbs sharing coreferent pairs of
 14219 subject and object, all of the verbs are either in direct or in inverse form. In (90)
 14220 for instance, we find four verbs in inverse form in a row; each of them takes
 14221 *tr-wuu* 'grandfather, old man' as obviative subject and the main character of the
 14222 story Nyima 'Odzer as proximate object.

- 14223 (90) *tcendyre tx-wuu n̥u k̥u n̥y-wy-ŋyjtsʰi*
 LNK INDEF.POSS-grandfather DEM ERG IFR-INV-give.to.eat.and.drink
 14224 *tce, nyki, tuumgo n̥y-wy-mbi, tuu-ci ra n̥y-wy-j-tsʰi*
 LNK FILLER food IFR-INV-give INDEF.POSS-water PL IFR-INV-CAUS-drink
 14225 *tó-wy-čau-fka tce tce*
 IFR-INV-CAUS-be.full LNK LNK
 14226 'The old man gave him food and drinks, gave him food to eat, water to
 14227 drink, gave him enough for him to eat his fill.' (2011-05-nyima, 88-89)

14228 However, alternations between direct and inverse can also be found across
 14229 adjacent clauses with constant subjects and objects within a single passage. In
 14230 (91), the noun *lulu* 'cat'²⁴ is the proximate referent of the verbs *ko-myā* and *jo-*
 14231 *myā*, since they are in direct form, but then a shift to inverse occurs and its preys
 14232 (in the dual, the mouse and the sparrow) become proximate instead. The switch
 14233 between direct and inverse marking gives native speakers flexibility to change
 14234 the perspective of the narration.

²⁴This story is about humanized animals depicted as able to think and speak, and can be considered to be similar to human referents.

- 14235 (91) *tce nuu jamar tce ci numi kuu "lulu kuu yúr-ndza-tci" ra*
 LNK DEM about LNK INDEF DEM:DU ERG cat ERG INV-eat:FACT-1DU PL
 14236 *mii-nx-suso-ndzi kuu, "azo yŋŋgi-a nx azo yŋŋgi-a"*
 NEG-IFR-think-DU ERG 1SG be.right:FACT-1SG ADD 1SG be.right:FACT-1SG
 14237 *nx-suso-ndzi, tcendyre lulu nuu kuu ci ko-mja, ci*
 IFR-think-DU LNK cat DEM ERG one IFR:EAST-grab one
 14238 *no-mja tce, ndyre bna bna zo cʰy-wy-ndza-ndzi tce,*
 IFR:WEST-grab LNK LNK both EMPH IFR-INV-eat-DU LNK
 14239 'The other two were not thinking 'The cat will eat us', but rather 'I am
 14240 right, I am right', and the cat grabbed one on his left and one on his right,
 14241 and both ended up eaten by him.' (IWlu 2002, 76-79)

14242 In other cases, alternations between direct and inverse forms without change
 14243 in subjects and objects appear to be due to hesitations on the part of the speaker.
 14244 For instance, in (92) the speaker first chooses a direct 3PL→3' verb form *yrryt-nuu*,
 14245 with *rjylpu yuu u-ŋjor nura* 'the king's servants' being the proximate referent, but
 14246 then switches to the inverse 3'→3SG form *yuu-tsum*, with the character Nyima
 14247 'Odzer as proximate referent instead.

- 14248 (92) *rjylpu yuu u-ŋjor nura kuu nimawozyr, nuanuu*
 king GEN 3SG.POSS-servants DEM:PL ERG ANTHR DEM
 14249 *yrryt-nuu pjy-ŋu, yuu-tsum pjy-ŋu tceri,*
 throw:FACT-PL IFR.IPFV-be INV-take.away:FACT IFR.IPFV-be LNK
 14250 'As the king's servants were about to throw him (into the lake), to take
 14251 him (there).' (Nyima wodzer2002, 114-115)

14.3.3.4 Pseudo-passive

14253 In some texts translated from Chinese, inverse verb forms are used in configura-
 14254 tions with an inanimate object and an animate subject, an exception to the ani-
 14255 macy constraints described in §14.3.3.1, according to which a direct form would
 14256 be expected. This usage is similar to the generic subject construction (§14.3.2.5)
 14257 where the inverse also occurs with animate subjects and inanimate objects, but
 14258 semantically differs in that the subject is not generic, but rather an unknown
 14259 referent.

14260 Example (93) illustrates this construction with the verbs *jó-wy-kio* and *tó-wy-cu*,
 14261 whose object is the jar's cover and subject the girl inside the jar (whose presence
 14262 was unknown to the observer from whose point of view this passage is narrated).

- 14263 (93) *wi-tc^hira* [...] *yuu wi-fkaβ* *nunu jō-wy-kio.* *tce nuu*
 3SG.POSS-jar GEN 3SG.POSS-cover DEM IFR-INV-slide LNK DEM
 14264 *tó-wy-cuu* *tce nuatcu tce tce li,* *nuacimuma tce li,*
 IFR-INV-open LNK DEM:LOC LNK LNK again immediately LNK again
 14265 *wi-ŋga* *ra kui-mpcw~mpcyr* *ci,*
 3SG.POSS-clothes PL SBJ:PCP-EMPH-be.beautiful INDEF
 14266 *wi-bzury* *ra kui-βdu~βdi* *ci, tc^hemypuu ci,*
 3SG.POSS-appearance PL SBJ:PCP-EMPH-be.nice INDEF girl INDEF
 14267 *icq^ha* *tc^hira yuu wi-ŋguu* *nuatcu*
 the.aforementioned jar GEN 3SG.POSS-in DEM:LOC
 14268 *to-nuu-łob.*
 IFR:UP-AUTO-come.out
 14269 'The jar's cover slid over and opened, and a girl with beautiful clothes
 14270 and a very nice appearance came immediately out of it.' (150827
 14271 tianluo-zh, 102-103)

14272 The first two clauses translate Chinese 发现水缸盖被推开了 <fāxiàn shuǐgāng-
 14273 gài bì tuīkāi le> 'He realized that the jar's cover had been pushed open'. The
 14274 inverse forms correspond here to a 被 *bèi* 'passive' construction, and nearly all of
 14275 the examples of inverse expressing unknown (rather than generic) animate sub-
 14276 jects have been found in the translation of sentences containing this construction
 14277 in Chinese. This pseudo-passive construction appears to be an effect of calque
 14278 from the original, although Tshendzin, when asked about these examples, did
 14279 not consider them to be ungrammatical.

14280 In addition, there are a few cases in translated texts like (94) with inverse mark-
 14281 ing and unknown human subject (on the verb *pjy-wy-lwob* 'someone spilled it')
 14282 where no 被 *bèi* construction is found in the original: this example translates 他
 14283 发现水罐空了 <tā fāxiàn shuǐguàn kōng le> 'He realized that his water jar was
 14284 empty'. The fact that the translation in this example is somewhat removed from
 14285 the original would support the idea that the pseudo-passive inverse is a native
 14286 grammatical construction.

- 14287 (94) *tcendyre ri, ku-rtob tce wi-tuu-ci* *nura*
 LNK LNK IPFV-look LNK 3SG.POSS-INDEF.POSS-water DEM:PL
 14288 *pjy-wy-lwob tce kui-tu* *pjy-me qhe,*
 IFR-INV-spill LNK SBJ:PCP-exist IFR.IPFV-not.exist LNK
 14289 'He_i realized that someone had spilled the water (in his_i gourd), and none
 14290 was left.' (140505 liuhaohan zoubian tianxia-zh, 194)

14291 Thus, it is unclear at present whether the extension of the generic subject
 14292 construction to express unknown subjects (the ‘pseudo-passive’), is the result of
 14293 translatese, or whether it reflects a genuine but rare native construction.

14.3.4 Transitive irregular verbs

14295 Unlike in Zbu (Gong 2014), there are no transitive verbs in Japhug with irregular
 14296 1SG forms. The only irregularities related to person indexation are either found
 14297 in generic forms or defective conjugations.

14298 The verb *ti* ‘say’ takes the prefix *ku-* to express generic human subject as in
 14299 (95) as if it were an intransitive verb (§14.2.1.2) instead of the inverse *yuu-* found
 14300 on regular transitive verbs (§14.3.2.5); a form such as *†tú-wy-ti* would be incorrect.
 14301 It is not the only irregularity of *ti* ‘say’: this is also the only underived transitive
 14302 verb with a separate stem II in Japhug (§12.2.1.1).

- 14303 (95) *tce ckr̥z yuu u-mat nuu tʰye tu-kuu-ti yu*
 LNK oak GEN 3SG.POSS-fruit DEM acorn IPFV-GENR-say be:FACT
 14304 ‘The fruit of the oak is called an acorn.’ (08-CkrAz, 45)

14305 Although the prefix *ku-* expresses generic object on other transitive verbs
 14306 (§14.3.2.5), in the case of *ti* ‘say’ there is no ambiguity: the object of this verb
 14307 is necessarily a complement clause or a noun, and can never have a first, second
 14308 or generic person referent. The use of *ku-* to mark the transitive subject is remi-
 14309 niscent of Tshobdun, where both transitive and intransitive verbs mark generic
 14310 subject by the same prefix (Sun 2014b).

14311 The defective verb *mx-xsi* ‘it is not known’ only occurs in Factual Non-Past
 14312 negative with a generic subject. This transitive verb takes nouns or complement
 14313 clauses as object, usually with either an interrogative pronoun or a polar oppo-
 14314 sition as in (95), sometimes with the dubitative (§21.4.4). It cannot take any ad-
 14315 dditional affix (including nominalization prefixes, §16.7 and orientation preverbs,
 14316 §15.1.1.5), except for the autive *nu-* in the form *mx-nuu-xsi*, as in (97).

- 14317 (96) *tu-ndze yu maŋ mx-xsi.*
 IPFV-eat[III] be:FACT not.be:FACT NEG-GENR:know
 14318 ‘I don’t know whether (bears) eat (humans) or not.’ (21-pri, 120)

- 14319 (97) *a-pa, aki nuu stablupa ky-βde*
 1SG.POSS-father down DEM born.the.year.of.the.tiger OBJ:PCP-throw
 14320 *uŋ-spa nuu mx-nuu-xsi ri,*
 3SG.POSS-material DEM NEG-AUTO-GENR:know LNK
 14321 ‘Father, I don’t know whether the (boy) down there is someone born in

14322 the year of the tiger, (who must) to be thrown (into the lake as a sacrifice
 14323 to the lake monster), but...' (2011-05-nyima, 154)

14324 The stem *-xsi* contains the same root as *suz* 'know' but without *-z* suffix and
 14325 with a *x-* prefix which represents a fossilized allomorph of the regular generic
 14326 *kui-*. The verb *suz* 'know' is attested in generic form, as in (98). Although such
 14327 examples are very rare, they show that *mx-xsi* cannot be considered to be a sup-
 14328 plicative form in the paradigm of *suz* 'know'.

- 14329 (98) *nui ma kui-pe tci pú-wy-suz me,*
 DEM apart.from SBJ:PCP-be.good also AOR-INV-know not.exist:FACT
 14330 *mx-kui-pe tci pú-wy-suz me.*
 NEG-SBJ:PCP-be.good also AOR-INV-know not.exist:FACT

14331 'Apart from that, I don't know about the good or the bad things (that the
 14332 butterfly does).' (26-qambalWla, 55)

14333 The verb *krtupa* 'tell', which presents a unique case of incorporation (§16.1.2.7,
 14334 §20.13.1), only occurs in non-prefixed forms. Its paradigm is thus restricted to the
 14335 Factual Non-Past (the only tense without orientation preverb, §21.3.1.1), excluding
 14336 second person forms (which always take a prefix, whether in the mixed or
 14337 local domain), all inverse forms (which take the *wy-* inverse prefix) and non-finite
 14338 forms (§16.7). Table 14.15 (from Jacques 2012d) presents the defective paradigm
 14339 of *krtupa* 'tell', with the regular stem III *krtupe* in 1SG→3 and 3SG→3' forms,
 1440 alongside that of *ndza* 'eat'.

Table 14.15: Paradigm of the verb *krtupa* 'tell'

Person	'to eat'	'to tell'
1SG→3	<i>ndze-a</i>	<i>krtupe-a</i>
1DU→3	<i>ndza-tci</i>	<i>krtupa-tci</i>
1PL→3	<i>ndza-j</i>	<i>krtupa-j</i>
2SG→3	<i>tui-ndze</i>	XX
2DU→3	<i>tui-ndza-ndzi</i>	XX
2PL→3	<i>tui-ndza-nuu</i>	XX
3SG→3'	<i>ndze</i>	<i>krtupe</i>
3DU→3'	<i>ndza-ndzi</i>	<i>krtupa-ndzi</i>
3PL→3'	<i>ndza-nuu</i>	<i>krtupa-nuu</i>

14.3.5 Transitive verbs with dummy subjects

A handful of transitive light verbs (*βzu* ‘make’ §22.4.2.1, *lvt* ‘release’ §22.4.2.2, *tçvrt* ‘take out’ §22.4.2.3, *ndo* ‘take’ §22.4.2.4, *ta* ‘put’ §22.4.2.6 and *ts^hor* ‘attach’) occur in the dummy subject construction, expressing natural phenomena, in particular meteorological ones.²⁵

In this construction, the verb only has one overt (always singular) absolute nominal argument. The only form of the paradigm is the direct 3SG→3’ (§14.3.2.2), with Stem III alternation in non-past tenses as in (100), and C-type preverbs in Aorist as in (99), showing that the verb, despite its lack of ergatively-marked subject, is unambiguously transitive (§14.3.1).

- (99) *tyje na-βzu q^he juu-me cti.*
sun AOR:3→3'-make LNK IPFV-not.exist be.AFF:FACT

‘It disappears when the sun appears.’ (25-RmArYWG, 36)

- (100) *uu-ta_B ri kuu-wyrum ku-te, ku-kuu-ta ci tu qhe, numui li k^huarwum ju*
3SG.POSS-on LOC SBJ:PCP-be.white IPFV-put[III] IPFV-SBJ:PCP-put INDEF
exist:FACT LNK DEM again mold be:FACT

‘A white thing grows on it (meat that has been left to rot), there is something that grows on it, this is also mold.’ (20-sWrna, 61)

The unique absolute argument of this construction superficially resembles an object. However, in (100), note that the subject participle *ku-kuu-ta* ‘(the thing) that grows (on it)’ (§16.1.1.4) is used to relativize this argument instead of an object participle (§23.5.3.4) as would have been expected (see also §16.1.1.5).

Moreover, despite the unambiguous morphological transitivity of the verb, the ergative is strictly impossible on the noun, even in the case of personified natural forces. For instance, in the retellings of Aesop’s story ‘The North Wind and the Sun’, although *akuuc^horle* ‘east wind’²⁶ occurs with the ergative with other verbs, and although here the North Wind is anthropomorphized and is described as blowing on purpose (to compete with the sun), the ergative is not accepted when the main verb is *βzu* ‘make’ as in (101).

- (101) *akuuc^horle nuu to-βzu tce rcanuu,*
east.wind DEM IFR-make LNK UNEXP:DEG

‘The East (North) Wind blew.’ (aesop feng he taiyang-zh, 9)

²⁵These dummy subjects, which cannot be realized, correspond to expletive pronouns in languages which require overt subjects.

²⁶This term was chosen to translate ‘Northern Wind’.

14370 In addition, the light verbs in this construction lack one of the seven morpholo-
 14371 gical properties of transitive verbs (§14.3.1): they select dental infinitives instead
 14372 of bare infinitives (§16.2.3). Compare for instance (102) where *βzu* ‘make’ occurs
 14373 in the bare infinitive *tu-βzu* with (103), where the bare infinitive *w-βzu* is found
 14374 instead, as *βzu* ‘make’ is in a plain transitive construction.

- 14375 (102) *tvrtsa kuu-wxti tsa tur-βzu to-za.*
 wave SBJ:PCP-be.big a.little INF:II-make IFR-start
 14376 ‘There started to be big waves (on the sea).’ (140430 yufu he tade qizi-zh,
 14377 100)
- 14378 (103) *tcendyre cʰa w-skvt w-βzu lo-za.*
 LNK alcohol 3SG.POSS-speech 3SG.POSS-BARE.INF:make IFR-start
 14379 ‘He started drunk-talking.’ (150906 qingfeng-zh, 66)

14380 The list of the verbs which allow the dummy transitive subject construction
 14381 is not closed. For instance the causative of *amŋym* ‘be even, be homogeneous’
 14382 occurs with the noun *tu-mu* ‘sky, weather’ in (104).

- 14383 (104) *jisŋi tuu-mui nui kuu-fse tʰa-suu-ŋmŋym*
 today INDEF.POSS-sky DEM SBJ:PCP-be.like AOR:3→3'-be.homogeneous
 14384 *zo, tŋye tci mui-na-βzu, tuu-mui tci*
 EMPH sun also NEG-AOR:3→3'-make INDEF.POSS-weather also
 14385 *mui-ka-lxt*
 NEG-AOR:3→3'-release
 14386 ‘Today the weather was uniform, there was neither sun nor rain.’
 14387 (elicited)

14.4 Ditransitive verbs

14388 Ditransitive verbs are trivalent verbs which follow the transitive conjugation
 14389 (unlike trivalent semi-transitive verbs, §14.2.5). Both indirective and secundative
 14390 transitive verbs are attested (Malchukov et al. 2010), and causative verbs deriving
 14391 from monotransitive verbs also belong to this category.

14.4.1 Indirective

14394 Most non-derived ditransitive verbs in Japhug are indirective. The theme is in the
 14395 absolute and is indexed as an object. The recipient either takes dative (§8.3.1)

14396 or genitive (§8.2.3.2) flagging, as in (105), or is encoded as a possessive prefix on
 14397 the object.

- 14398 (105) *kui-rryma ra nuu-cki nutcu, nyki, kuxtco ci*
 SBJ:PCP-WORK PL 3PL.POSS-DAT DEM:LOC FILLER basket INDEF
 14399 *z-Jy়-rjo,*
 TRAL-IFR-borrow
 14400 ‘(The leopard) borrowed a basket from the workers.’ (2002 qalakWcqraq,
 14401 43)

14402 The indirective category can be divided into four semantic subgroups.

14403 First, it comprises verbs of speech, such as *ti* ‘say’, *t^hu* ‘ask’, *nd_zuu* ‘complain,
 14404 accuse’ and *f_çyt* ‘tell’, which mark the addressee with the dative.

14405 Second, it includes verbs expressing gift or temporary transfer of objects such
 14406 as *k^ho* ‘give, pass’ (§12.2.2.3) and *p^hul* ‘offer’ and *rjo* ‘borrow’ and *nynguu* ‘borrow’.
 14407 Th first two encode the source as their subject while their recipients takes the
 14408 dative case, whereas the latter encode the recipient as their subject, and their
 14409 source appear in the dative.

14410 The two verbs translated as ‘borrow’ differ in that the former (*rjo*) expresses
 14411 the lending of an object which can be returned in its original shape to the ori-
 14412 ginal owner, while the latter (*nynguu*) is used with grain or money, for which an
 14413 equivalent amount is given back instead of the original object (which has pre-
 14414 sumably already been consumed).²⁷ In addition, verbs of manipulation such as
 14415 *yut* ‘bring’ and *tsum* ‘take away’ can optionally take a dative beneficiary and
 14416 convey a meaning similar to verbs of giving, as in example (106).

- 14417 (106) *tcendyre rjylpu u-p^he la-tsum pui-ŋu,*
 LNK king 3SG.POSS-DAT AOR:3→3:UPSTREAM-take.away SENS-be
 14418 ‘He brought it (the shoe) to the king.’ (tWxtsa 2003, 16)

14419 Third, verbs expressing hitting or throwing can also be indirective, for instance
 14420 *þde* ‘throw’, and also *l_ht* ‘release’, which occurs in many light verb constructions
 14421 (§22.4).

14422 Fourth, some verbs of manipulation have an obligatory indirect argument ex-
 14423 pressing the goal, in particular the verb *rku* ‘put in’ which selects the relator
 14424 noun *u-ŋgu* ‘inside’ (§8.3.4.4). For most verbs of manipulation the goal is op-
 14425 tional (§14.5.4).

²⁷The meaning ‘lend’ is expressed with the corresponding causatives, see §14.4.3.

14426 The object of indirective verbs is nearly always third person, and local and in-
 14427 verse configurations are almost never attested (except for inverse generic forms,
 14428 §14.3.2.5). For instance in (§107), the recipient is 1SG ('ask me'), but the verb *t^hu*
 14429 'ask' has the imperative 2SG→3 form (§21.4.2.1) because the non-overt theme cor-
 14430 responds to the questions that the addressee is about to ask, and using a 2→1
 14431 configuration here would be non-sensical.

- 14432 (107) *tx-t^he jyy*
 IMP-ask[III] be.allowed:FACT
 14433 'Ask [me your questions]!' (conversation, several attestations)

14434 Local or inverse configurations are attested with indirective verbs of giving in
 14435 the corpus to refer to asking or giving a girl in marriage, as in (108), as this is the
 14436 most common situation when a human can occur as theme of a verb of this type.

- 14437 (108) *a-wa kui, turme yuu u-rzaβ nū-wy-k^ho-a*
 1SG.POSS-father ERG person GEN 3SG.POSS-wife AOR-INV-give-1SG
 14438 *cti ny*
 be.AFF:FACT SFP
 14439 'My father has offered me in marriage to someone.' (150828 liangshanbo
 14440 zhuyingtai-zh, 166)

14441 The only indirective verb of speech which is commonly used with a human
 14442 theme is *ndzuu* 'complain, accuse': the object and the dative argument correspond
 14443 to the persons about whom and to whom one complains, respectively. For in-
 14444 stance in (§109), the object is 2SG, and the dative argument a third person refer-
 14445 ent.

- 14446 (109) *azo <laoshi> u-cki ta-ndzuu*
 1SG professor 3SG.POSS-DAT 1→2-accuse:FACT
 14447 'I will issue a complain against you to the professor.' (150826
 14448 liangshanbo zhuyingtai-zh, 84)

14449 Indirective verbs of manipulation can be used with animate or even human
 14450 objects, and do occur in local configurations, as in (§110).

- 14451 (110) *azo a-xtu u-ŋguu c^hui-ta-rku*
 1SG 1SG.POSS-belly 3SG.POSS-in IPFV:DOWNSTREAM-1→2-put.in
 14452 'I will put you in my belly.' (140505 xiaohaitu-zh, 83)

14453 **14.4.2 Secundative**

14454 Secundative verbs have two absolute arguments, one of which (the recipient)
 14455 is indexed on the verb, and the other one (the theme) is not. The theme is a semi-
 14456 object, and presents some objectal properties (§16.1.2.4, §23.5.4.2).

14457 **14.4.2.1 Inventory of secundative verbs**

14458 Most secundative verbs express temporary or permanent giving: *mbi* ‘give’ and
 14459 *ctsui* ‘entrust with’. Since these verbs index the recipient, they commonly occur
 14460 in local configurations (§14.3.2.3), as in (§111).

- 14461 (111) *sumat ky-kur-ctsui-a*
 fruit AOR-2→1-entrust.with-1SG
 14462 ‘You had left me (a jar of) fruit.’ (140516 yiguan ganlan-zh, 77)

14463 The verb *mbi* ‘give’ can in addition take an essive adjunct (give as *X*, §8.1.7),
 14464 as *nr-rzaβ* ‘your wife’ in (112); in this sentence the object (theme) is *a-me nuu* ‘my
 14465 daughter’.

- 14466 (112) *a-me nuu nr-rzaβ nuu-ta-mbi nu*
 1SG.POSS-daughter DEM 2SG.POSS-wife IPFV-1→2-give be:FACT
 14467 ‘I will give you my daughter in marriage. (=I will give her to you as your
 14468 wife)’ (140428 yonggan de xiaocafeng, 175)

14469 Most verbs of speech are indirective, but *suxçrt* ‘teach’ has secundative align-
 14470 ment (see example 145, §18.6.4). This verb is perhaps historically a causative
 14471 (§17.2.1.4), but it is not analyzable as such synchronically.

14472 The simulative verb *stu* ‘do like’ can also be considered to be secundative. It
 14473 takes a semi-object designating the manner (generally a demonstrative), and its
 14474 object refers to the entity (human, animal or inanimate) subjected to the action
 14475 (with infinitival complement clauses however, there is no raising of the object
 14476 from the complement, see §24.5.7). In (113), this verb occurs in a 3DU→1SG con-
 14477 figuration (§14.3.2.6), and takes as semi-object the demonstrative *nura* ‘these
 14478 (things)’. In serial verb constructions, it occurs with transitive verbs, sharing the
 14479 subject and the object of its counterpart, but taking an additional (generally de-
 14480 monstrative) manner semi-object (§25.4.1.2).

- 14481 (113) *a-pi ni kui nura t̪í-wy-stu-a-ndzi ndza*
 1SG.POSS-elder.sibling DU ERG DEM:PL AOR-INV-do.like-1SG-DU reason
 14482 *cti ma,*
 be.AFF:FACT LNK
 14483 ‘(This is because) my two brothers treated me like that.’ (qachGa2003,
 14484 175)

14.4.2.2 The theme of secundative verbs

14486 The theme of secundative verbs cannot be indexed, unlike that of indirective
 14487 verbs, and first or second person themes are not appropriate with the verb *mbi*
 14488 ‘give’. To express meanings such as ‘X gave me/you to Y’, either an indirective
 14489 verb has to be used (see 108 above), or alternatively the antipassive form *r̪ymbi*
 14490 ‘give to someone’. This antipassive form is the only verb form in Japhug lacking
 14491 morphological transitivity (§14.3.1, §18.6.4) that can be used with inverse and
 14492 local person indexation, as shown by (114a) and (114b).

- 14493 (114) a. *a-wa kui azo nūr-wy-r̪y-mbi-a*
 14494 1SG.POSS-father ERG 1SG AOR-INV-APASS-give-1SG
 ‘My father gave me away.’ (elicited)
 14495 b. *nyzo kui azo jy-kui-r̪y-mbi-a*
 14496 2SG ERG 1SG IFR-2→1-APASS-give-1SG
 ‘You gave me away (without me knowing).’ (elicited)

14.4.3 Causative of transitive verbs

14497 The sigmatic causative is the only valency-increasing derivation in Japhug which
 14498 can be applied to transitive (unlike applicative §17.4 and tropative §17.5) verbs.
 14500 When the base verb is transitive, its causative form is ditransitive. I use the no-
 14501 tation $C \rightarrow C' \rightarrow P$ to describe causative configurations with three participants: C
 14502 represents the causer (corresponding to the initiator of the causation, the argu-
 14503 ment that is added by the causative derivation), C' the causee (corresponding to
 14504 the subject of the base verb) and P the patientive (corresponding to the object of
 14505 the base verb); for instance, if the base verb is ‘help’, a $1SG \rightarrow 3PL \rightarrow 2SG$ configura-
 14506 tion can be interpreted as ‘I made them help you.’

14507 Lexicalized causatives are like underived secundative verbs, and index the re-
 14508 cipient as the object. This category includes *jtsʰi* ‘give to drink’, which derives
 14509 from the monotransitive verb *tsʰi* ‘drink’, and *çurŋo* ‘lend’, which comes from the

14510 indirective verb *rjo* ‘borrow’ (see 120 below for a more detailed discussion on
 14511 this derivation).

14512 Examples (115) and (120) illustrate the 2→1→3 configuration with the verbs
 14513 *jtsʰi* ‘drink’ and *çurjо* ‘lend’, expressed in the same way as the local 2→1 config-
 14514 urations of a monotransitive verb (§14.3.2.3).

- 14515 (115) *a-wuu* *tur-ci* *pui-kui-j-tsʰi-tci*
 1SG.POSS-grandfather INDEF.POSS-water IPFV-2→1-CAUS-drink-1DU
 14516 *úr-jγ?*
 QU-be.allowed:FACT
 14517 ‘Grandfather, could you give us water to drink?’ (nyima wodzer 2002, 76)

14518 In the case of non-lexicalized sigmatic causatives, the status of the causee is
 14519 more complex, since it can optionally receive ergative flagging (§8.2.2.6), and
 14520 cannot be relativized like an object (see §23.5.6). The direct object of such verbs
 14521 can also be relativized using constructions unavailable for the direct object of
 14522 monotransitive verbs (§23.5.3.3).

14523 In addition, unlike secundative verbs, triactantial causatives can either index
 14524 the causee or the argument corresponding to the object of the base verb, depen-
 14525 ding on their person: if the causee or object is first or second person, and the other
 14526 argument is third person, the first or second person will be indexed regardless of
 14527 its syntactic function.

14528 For instance, all three examples (116), (117) and (118) show 2→1 indexation, but
 14529 the first two has a 2→3→1 configuration, and index the patientive argument as
 14530 the object, while the last one is an instance of a 2→1→3 configuration, and it
 14531 indexes the causee as object (see also §17.2.4 and 25, §8.1.7 for additional examples
 14532 of the same type). The prevalence of first and second persons over third persons
 14533 in this context might support the person hierarchy (66a) postulated in (§14.3.2.8).

- 14534 (116) *azo tuu-muu* *kui pui-kui-su-χtei-a*, *trndzo nu!*
 1SG INDEF.POSS-weather ERG AOR-2→1-CAUS-wash-1SG cold SFP
 14535 ‘You caused me to be drenched by the rain, it is so cold!’ (2014-kWLAG,
 14536 158)
- 14537 (117) *nyzo ty-ndze* *ma alo* *ma-ly-tui-tsum* *ma*
 2SG IMP-eat[III] LNK upstream NEG-IMP:UPSTREAM-2-take.away LNK
 14538 *tʰa li kui-su-χnduu-a*
 later again 2→1-CAUS-hit-1SG
 14539 ‘Eat it, don’t take it up there, you would cause me to be beaten again.’
 14540 (2003-kWBra, 71-72)

- 14541 (118) *azo cyruu pur-kur-z-nuants^h-o-a*
 1SG meat IPFV-2→1-CAUS-eat-1SG
 14542 ‘You make me eat the bones.’ (2014-kWLAG, 211)

14543 While indexation is ambiguous in such cases, ergative flagging helps distin-
 14544 guish between 2→3→1 and 2→1→3 configurations: the ergative is present on the
 14545 causee in (116), and absent on the patientive argument in (118) (see also §8.2.2.6).

14546 Configurations with both causee and patientive argument being first or second
 14547 person (3→2→1 and 3→1→2) are not attested in the corpus,²⁸ and are not easy
 14548 to elicit. The elicited examples (119a) and (119b) show that 3→1→2 and 3→2→1
 14549 configurations are expressed using mixed 3→1 and 3→2 forms, respectively. In
 14550 other words, the causee is indexed as object, and the patientive argument is not
 14551 indexed.

- 14552 (119) a. *uizo kuu nyzo púr-wy-sui-mto-a*
 3SG ERG 2SG IPFV-INV-CAUS-see-1SG
 14553 ‘He made me see you.’ (3SG→1SG→2SG, elicited)
 b. *uizo kuu azo puu-túr-wy-sui-mto*
 3SG ERG 1SG AOR-2-INV-CAUS-see
 14554 ‘He made you see me.’ (3SG→2SG→1SG elicited)

14556 The causative derivation of indirective verbs has several different effects on
 14557 argument structure. In the case of the lexicalized causative *çurjо* ‘lend’, the re-
 14558 lationship between its three arguments and those of the base verb *rjo* ‘borrow’
 14559 can be summarized as follows (compare 120 with 105 in §14.4.1).

- 14560 • The subject of *rjo* ‘borrow’, the receiving person, corresponds to the object
 14561 of *çurjо* ‘lend’.
- 14562 • The object of *rjo*, the thing that is borrowed, corresponds to the semi-
 14563 object of *çurjо* ‘lend’.
- 14564 • The dative oblique argument of *rjo*, the giving person, corresponds to the
 14565 subject of *çurjо* ‘lend’, which is semantically both causer and source.

- 14566 (120) *wortchi zo, ny-χsyrazŋ jnu-kur-cuu-rjo-j*
 please EMPH 2SG.POSS-magical.object IPFV-2→1-CAUS-borrow-1PL
 14567 ‘Please, lend us you magical object.’ (2005 Kunbzang, 395)

²⁸See however (121) below, quadrivalent configuration with a second person beneficiary in the dative and 3SG→1SG verb indexation.

This ‘inversive’ causative derivation reverses the direction of the borrowing action and modifies the argument structure and the alignment (indirective to secundative) without adding any new referent, by merging the source and causer roles, interpreting *curjo* as ‘ X_i causes Y to borrow Z from himself $_i$ ’. Other cases of this type of ‘inversive’ causative are presented in §17.2.5.7.

For most indirective verbs however, recipients and beneficiaries are marked with the dative and/or with a coreferent possessive prefix. Thus, the causative derivation does turn them into absolutive patientive arguments. For instance, the beneficiary of the verb *suyut* ‘send, cause to bring’ is in the dative as that of its base verb *yut* ‘bring’, as shown by (121), where dative marking on the 2SG is obligatory.

- (121) *azo a-βdaxpu nuu kuu pjy-numto tce tcendyre nx-cki*
 1SG 1SG.POSS-master DEM ERG IFR-find LNK LNK 2SG.POSS-DAT
 jy-wy-suu-yuit-a ηu tce,
 AOR-INV-CAUS-bring-1SG be:FACT LNK
 ‘My master found it and sent me to bring it to you.’ (140513 qianshang he
 xiaotou-zh, 72)

14.4.4 Causative of semi-transitive verbs

Causative verbs derived from semi-transitive ones (§14.2.3) show secundative alignment: the causee is treated as object, and the semi-object of the base verb as an absolutive oblique, not indexed on the verb. For instance, the causative *syrmi* ‘give a name’ (§17.2.2.7) of the verb *rmi* ‘be called’ selects the entity to which a name is given as direct object, the 1PL in example (122).

- (122) *syrndzu c^ho tats^hi ra kui syju-puu tu-nu-ti-nuu tce,*
 TOPO COMIT TOPO PL ERG pl.p-person.from IPFV-AUTO-say-PL LNK
 bdurjyt ra syju-puu tú-wy-syrmij ηu.
 TOPO PL TOPO-person.from IPFV-INV-give.name-1PL be:FACT
 ‘Those from Gsar-rdzong and Da-tshang say ‘Sangu people’, they name
 us, (those) of Gdong-brgyad, ‘Sangu people’.’ (23-tCAphW, 12)

14.5 Labile verbs

Most Japhug verbs strictly follow either the intransitive, or the transitive conjugations, and voice alternations such as causative (§17.2, §17.3), applicative (§17.4) and antipassive (§18.6) are needed to change their valency. A limited number of

¹⁴⁵⁹⁷ labile verbs are compatible with both conjugations; three groups can be distinguished: plain labile, labile with oblique arguments and labile with semi-object.

¹⁴⁵⁹⁹ 14.5.1 Transitive-intransitive labile verbs

¹⁴⁶⁰⁰ 14.5.1.1 Morphosyntactic properties

¹⁴⁶⁰¹ Plain labile verbs are compatible with both the intransitive and the transitive conjugations. When conjugated intransitively, they only have one argument (no ¹⁴⁶⁰² semi-object or oblique argument). When conjugated transitively (following the ¹⁴⁶⁰³ features in §14.3.1), their subject corresponds to the intransitive subject, and the ¹⁴⁶⁰⁴ added argument is the object, except for a handful of examples (§14.5.1.4).

¹⁴⁶⁰⁵ Compare for instance the intransitive and transitive use of the verb *βluu* ‘burn’ in (123). In the (123a), the verb has 1SG indexation, and since it lacks the 12SG→3 ¹⁴⁶⁰⁶ past -t suffix (§14.3.2.1), cannot be a transitive verb form (§14.3.1). This intransitive ¹⁴⁶⁰⁷ verb form cannot take an object, and means ‘make a fire’. In (123b), the verb has ¹⁴⁶⁰⁸ the -t suffix and is therefore a 1SG→3 transitive configuration (§14.3.2.1), and can ¹⁴⁶⁰⁹ take an overt object (here *smi* ‘fire’, but it can also occur with a noun referring to ¹⁴⁶¹⁰ the object being burned).

- ¹⁴⁶¹² (123) a. *tr-βluu-a*
AOR-burn-1SG
¹⁴⁶¹⁴ ‘I made a fire’. (elicited; 1SG:INTR)
- b. *smi tr-βluu-t-a*
fire AOR-burn-PST:TR-1SG
¹⁴⁶¹⁶ ‘I made a fire’. (elicited; 1SG→3)

¹⁴⁶¹⁷ Table 14.16 gives additional examples of labile verbs with open syllable stems ¹⁴⁶¹⁸ in transitive and intransitive conjugations.

Table 14.16: Aorist 1SG(→3) of labile verbs

Verb	Intransitive form	Transitive form
<i>βluu</i> ‘burn’	<i>tr-βluu-a</i>	<i>tr-βluu-t-a</i>
<i>çlu</i> ‘plough’	<i>tr-çlu-a</i>	<i>tr-çlu-t-a</i>
<i>fci</i> ‘forge’	<i>t'uu-fci-a</i>	<i>t'uu-fci-t-a</i>
<i>murkuu</i> ‘steal’	<i>tr-murkuu-a</i>	<i>tr-murkuu-t-a</i>
<i>numbr̥puu</i> ‘ride’	<i>tr-numbr̥puu-a</i>	<i>tr-numbr̥puu-t-a</i>
<i>nymno</i> ‘watch’	<i>kr-nymno-a</i>	<i>kr-nymno-t-a</i>

All criteria listed in §14.3.1 (when applicable) are congruent to distinguish between the transitive and intransitive forms of labile verbs; Table 14.17 presents the application of the seven tests to the verb *βluu* ‘burn’.

Table 14.17: Transitivity tests

		Intransitive form	Transitive form (with <i>smi</i> ‘fire’ as object)
1	C-type preverb, AOR:3SG(→3')	<i>tr-βluu</i>	<i>ta-βluu</i>
2	Stem III, IPFV:3SG(→3')	<i>tu-βhu</i>	<i>tu-βli</i>
3	Dental/bare INF	<i>tu-βluu (to-za)</i>	<i>u-βluu (to-za)</i>
4	Subject participle	<i>kuu-βluu</i>	<i>u-kuu-βluu</i>
5	-t suffix, AOR:1SG(→3)	<i>tr-βluu-a</i>	<i>tr-βluu-t-a</i>
6	Progressive	<i>jnu-βluu</i>	<i>jnu-ṛsu-βluu</i>
7	Generic	<i>tu-kuu-βhu</i>	<i>tú-wy-βluu</i>

Tests 2 and 5 are not operational with verbs whose stem ends in close syllable, but at least test 1 (in the case of *tar* ‘weave’ in 124) is always applicable. Some labile verbs can even be used with the non-periphrastic Past Imperfective (§21.5.3), as in (124a). The presence or absence of the ergative on third person overt subjects is also a useful confirmation of the valency of the verb; for instance, in (124a) the subject *tcʰeme* ‘girl’ lacks ergative marking, confirming the fact that *tar* ‘weave’ is used here intransitively.

- (124) a. *tcʰeme ci pui-tar jnu-ŋu*,
 girl INDEF PST.IPFV-weave SENS-be
 ‘A girl was weaving.’ (tWxsta2003, 28)
- b. *nunua muntoŋ nuŋ tʰa-tar tce*,
 DEM flower DEM AOR:3→3'-weave LNK
 ‘(When) he wove this pattern, ...’ (150825 huluwa, 98)

For verbs whose objects cannot be human for semantic reasons, test 7 (as in 125) can also be used to distinguish between intransitive and transitive uses;²⁹ if the object can be human, then testing for local configurations (§14.3.2.3) is possible.

²⁹Otherwise, a generic *kuu-* could be generic object, see §14.3.2.5.

- 14637 (125) a. *cuu jná-wy-p^hut, tu-kar-clu*,
stone IPFV-INV-take.out IPFV-INV-plough
 14638 ‘One has to take out the stones, to plough,’ (2010, 10, 11)
- 14639 b. *tur-ji nuu lú-wy-clu tce*
INDEF.POSS-field DEM IPFV-INV-plough LNK
 14640 ‘One ploughs the fields, and ...’ (07-tWsqr, 21)

14.5.1.2 Classification of labile verbs

14642 In addition to those in Table 14.16, the following verbs are labile: *yndzur* ‘grind’,
 14643 *lry* ‘herd’, *nbras* ‘loosen the earth’, *ntšu* ‘weed with a hoe’, *nyre* ‘laugh’, *nuuyja*
 14644 ‘talk back, oppose’, *nuk^hyja* ‘talk back, oppose’, *nuproxbma* ‘imitate’, *rju* ‘parch’,
 14645 *sulaþrdxβ* ‘kick (with its forelimbs)’, *suqartsuu* ‘kick’, *suso* ‘think’, *tar* ‘weave’, *txβ*
 14646 ‘thresh’.

14647 The majority of plain labile verbs denote actions modifying the substance or
 14648 shape of a material (*yndzur* ‘grind’, *clu* ‘plough’ etc), in particular activities related
 14649 to agriculture and traditional trades. When used intransitively, these verbs do not
 14650 specify any object, and generally express atelic actions. For instance in (124a), *puu-*
 14651 *tar* means ‘do weaving’, without intrinsic endpoint and without reference to a
 14652 particular piece of cloth.

14653 Another category of labile verbs express action negatively affecting people
 14654 (such as *nuuyja* ‘talk back, oppose’ etc), some with animal subjects (*sulaþrdxβ*
 14655 ‘kick (with its forelimbs)’ etc). These verbs take humans as objects in the transitive
 14656 conjugation;³⁰ when used intransitively, they express a general propensity
 14657 of the subject to do these negative actions.

14658 The perception verb *mto* ‘see’ also has an intransitive stative use, meaning
 14659 ‘have sharp eyesight’, taking the noun *tu-myaž* ‘eye’ as subject, and expressing
 14660 the experiencer as subject possessor). Example (126) shows that the verb *mto* is
 14661 conjugated intransitively (without stem III alternation, otherwise *juu-mtym* ‘he
 14662 sees it’ would be expected). Some verbs derived from the root *mto*, such as the
 14663 velar causative *yrmtō* ‘cause to recover eyesight’ (§17.3.3.2), come from this stative
 14664 intransitive use rather than the more common transitive one.

- 14665 (126) *uu-myaž nuu wuma juu-mto juu-sa juu-ŋu ny̥ma,*
3SG.POSS-eye DEM really SENS-be.sharp SENS-be.strong SENS-be SFP
 14666 ‘The (eagle) has a sharp eyesight.’ 140522 Kamnyu zgo, 226

³⁰The verb *murkuu* ‘steal’, though adversely affecting the persons whose possession are stolen, does not belong to this category since it takes the possession as object, not the victim of the theft.

14.5.1.3 Accusative lability

14668 Most labile verbs in intransitive use have a meaning and syntactic function remi-
 14669 niscent of antipassive (§18.6) derivations, and share with them the ability to take
 14670 the non-periphrastic Past Imperfective *pui-* (§18.6.6). Nevertheless, it is unclear
 14671 whether the transitive use of labile verbs is primary; one could also consider
 14672 the intransitive use to be the basic function, and compare their transitive use
 14673 to the Applicative derivation (§17.4) instead. Since the alignment of the subjects
 14674 between the transitive and intransitive uses of these verbs follows nominative-
 14675 accusative, it is referred to as ‘accusative lability’ in this work.³¹

14676 Two plain labile verbs, *nire* ‘laugh’ and *suso* ‘think’, have an antipassive form.³²
 14677 These two verbs also differ from other labile verbs in having idiosyncratic seman-
 14678 tic differences in their intransitive and transitive uses.

14679 The verb *nire* ‘laugh’ is a denominal verb deriving from the inalienable noun
 14680 *tr-re* ‘laugh’. In its transitive use ‘laugh at, mock’, it encodes the stimulus as direct
 14681 object. Both the intransitive meaning and the transitive one are well-attested
 14682 functions of the *nui-/ny-* denominal prefix: parallel examples include *nymbar* ‘have
 14683 a good time’ (from *tr-bar* ‘good time’, §20.7.1) for the intransitive use of *ny-* and
 14684 *nymbru* ‘get angry against’ (from *tr-mbru* ‘anger’, §20.7.2) for its transitive use.
 14685 Therefore, the most likely way to account for the lability of *nire* is to posit that it
 14686 represents the conflation of two denominal derivations from the same base noun.

14687 The antipassive form *snyre* ‘laugh at people’ is semantically connected with
 14688 the meaning of the transitive use, and semantically quite different from the in-
 14689 transitive use of *nire* ‘laugh’.

14690 The intransitive use of *suso* ‘think’ is restricted to the meaning ‘in X’s opinion’,
 14691 as in (127),³³ and has no semantic overlap with the antipassive *rusuoso* ‘think’,
 14692 ‘ponder’ (128).³⁴

- 14693 (127) *tce nui aj pjui-suso-a tce nunaia tui-tup^hu pui-ŋu-ndzi tce*
 LNK DEM 1SG IPFV-think-1SG LNK DEM one-species SENS-be-DU LNK
 14694 ‘In my opinion, these two (animals belong to) the same species.’
 14695 (20-ldWGi, 45)

³¹The term ‘agent-preserving lability’ is less felicitous, since the subjects of labile verbs are not always agents.

³²This feature is shared with the semi-transitive labile verb *syo* ‘listen’ see §14.5.3. On the other hand, no labile verb is compatible with applicative derivation.

³³The intransitivity of *suso* ‘think’ in (127) is shown by the absence of Stem III, which would be expected in the Imperfective 1SG→3 (§21.2.1). Note that the orientation DOWNWARDS is selected, instead of WESTWARDS in the transitive use (§15.1.5.2).

³⁴Note that this antipassive form is irregular, §18.6.1.

- 14696 (128) *pjuu-ruu-suuso ny pjuu-ruu-suoso tce*,
 IPFV-APASS-think ADD IPFV-APASS-think LNK
 14697 ‘He thought about it over and over.’ (02-deluge2012, 63)

14698 In the case of *suoso* ‘think’, it appears that the very restricted intransitive use
 14699 is derived from the transitive one.

14700 **14.5.1.4 Ergative lability**

14701 A handful of labile verbs have ergative (or passive-like) lability: the subject of the
 14702 verb when used intransitively corresponds to its object when used transitively.

14703 The clearest example is provided by the denominal verb *nuaŋjox* from *ŋjox* ‘ser-
 14704 vant’, which means ‘give orders to’ in transitive use (from ‘treat as a servant’,
 14705 §20.7.2), and ‘work as a servant’ in intransitive use. In (129), the transitive *nuaŋjox*
 14706 shares its subject and object with causativized verbs, while in (130) the intransi-
 14707 tive subject of *nuaŋjox* has the same referent as the subject of *z-nuu-nymε*, as shown
 14708 by the presence of a translocative echo (§15.2.8.2) on both verbs (which cannot
 14709 target the direct object, §15.2.2).

- 14710 (129) *tcʰeme nuu tce tce uu-kʰa nutcu ko-z-ryzi tce*,
 girl DEM LNK LNK 3SG.POSS-house DEM:LOC IFR-CAUS-stay LNK
 14711 *juu-nuaŋjox tu-z-ryme pjy-ŋju*.
 IPFV-give.orders IPFV-CAUS-work[III] IFR.IPFV-be
 14712 ‘The witch kept the girl in the house, and gave her orders and put her to
 14713 work.’ (140507 tangguowu-zh, 110-111)

- 14714 (130) *sŋi qʰe z-juu-nuaŋjox tce kuaβxa ra nuu-ma*
 day LNK TRAL-IPFV-work.as.servant LNK noble PL 3PL.POSS-work
 14715 *z-nuu-nymε*
 TRAL-IPFV-do.work[III]
 14716 ‘In the day, he would work as a servant, and do work for the nobles.’
 14717 (150828 donglang, 10)

14718 Since the *nuu-/ny-* denominal prefixes occur with similar meanings (‘treat as *X*’
 14719 and ‘become/serve as *X*’) on other base nouns (see §20.7.1 and §20.7.2), the lability
 14720 of *nuaŋjox* can be accounted for by assuming a conflation of two homophonous
 14721 denominal derivations from the same base noun, as in the case *nyre* ‘laugh’ dis-
 14722 cussed above (§14.5.1.3). The fact that double denominal derivation yields ac-
 14723 cusative lability in one case and ergative lability in the other is a consequence

14724 of the high diversity of meanings associated with the hyper-productive *nuu-/mr-*
 14725 prefix (§20.7).

14726 The other examples of ergative lability are highly lexicalized, and the transitive
 14727 vs. intransitive functions have to be treated as different lexical entries synchron-
 14728 ically.

14729 The intransitive *ri* ‘remain’ ‘be left’ (131) (see also 87, §7.3.3.3) is related to the
 14730 transitive homophonous verb root *ri*, which is exclusively found in collocation
 14731 with *tuu-sroB* ‘life’ (§22.4.3.2) in the meaning ‘save X’s live’ (132). The entity whose
 14732 life is spared is encoded as subject of the intransitive *ri*, and as possessor of the
 14733 object *tuu-sroB* of transitive *ri* (see also 7, §9.1.1.1).

- 14734 (131) *uu-tcuu bnuuz nuu pjy-si, tuu-rdoB nuu jny-ri q^he*
 3SG.POSS-son two DEM IFR-die one-piece DEM IFR-remain LNK
 14735 ‘Two of her sons died, and one remained (alive).’ (Gesar 2003, 315)

- 14736 (132) *a-sroB ky-tuu-ri-t*
 1SG.POSS-life AOR-2-save-PST:TR
 14737 ‘You saved my life.’ (150906 qingfeng-zh, 121)

14738 Given the more specific meaning of transitive *ri*, it is more likely that it derives
 14739 from intransitive *ri* rather than the other way round. A further piece of evidence
 14740 in favour of this hypothesis is the irregular causative *βri* ‘protect’, which also
 14741 appears to derive from the intransitive *ri* ‘remain’ (§17.3.1). The relationship be-
 14742 tween intransitive *ri*, transitive *ri* and causative *βri* is purely historical. These
 14743 three verbs are synchronically completely distinct, and select different orienta-
 14744 tion preverbs (WESTWARDS, EASTWARDS and UPWARDS, respectively).

14745 The verb *pa* ‘do’ is one of the most common verbs in Japhug, with a wide
 14746 range of meanings including ‘close (door)’, ‘become (friend, spouses)’ and ‘dis-
 14747 cuss’ (§22.4.2.5). It selects not only nouns, but also infinitive complements as
 14748 objects (§24.5.2).

14749 Two intransitive verbs with the same root form *pa*, but only attested in 3SG,
 14750 also exist: the verb *pa* ‘pass X years’, which selects as subject a numeral re-
 14751 ferring to a number of years (see example 117, §22.4.1.4 and the discussion in
 14752 §7.3.1.7), and the light verb *pa* used as light verb with ideophones (§10.1.7.1). Both
 14753 of these functions are derivable from the meaning ‘do’ of the transitive verb
 14754 (§7.3.4.3, §22.4.2.5). The conversion to the intransitive conjugation may have oc-
 14755 curred through third person ambiguous forms in a dummy subject construction
 14756 (§14.3.5).

14757 The discussion above shows that in the cases of ergative lability, either the
 14758 intransitive verb (*ri* ‘remain’) or the transitive one (*pa* ‘do’) can potentially be the

¹⁴⁷⁵⁹ primary form, with transitivity or intransitivization by zero-derivation due
¹⁴⁷⁶⁰ to reanalysis in ambiguous contexts (on this topic, see also §12.2.2.3).

¹⁴⁷⁶¹ 14.5.2 Transitive-intransitive labile verbs with oblique arguments

¹⁴⁷⁶² The verb *rpu* ‘bump into’ is also labile, but unlike the previous verbs, it selects
¹⁴⁷⁶³ an argument with the relator noun *wi-taꝝ* ‘on, above’ (§8.3.4.3), corresponding to
¹⁴⁷⁶⁴ the person or object that the subject knocks/bumps into, as in (133).

- ¹⁴⁷⁶⁵ (133) *wi-zmbruu nūnū [...] rjymts^hu yuu wi-ŋguu rŋguu*
¹⁴⁷⁶⁶ 3SG.POSS-boat DEM sea GEN 3SG.POSS-in boulder
¹⁴⁷⁶⁶ *tu-kui-nui-łos nui wi-taꝝ ko-rpu.*
¹⁴⁷⁶⁷ IPFV-SBJ:PCP-AUTO-come.out DEM 3SG.POSS-on IFR-bump
¹⁴⁷⁶⁸ ‘His boat ran on a reef (a boulder coming out of the sea).’ (150830 baihe
¹⁴⁷⁶⁸ jieme-zh, 249)

¹⁴⁷⁶⁹ When used transitively, *rpu* ‘bump into’ takes an object corresponding to the
¹⁴⁷⁷⁰ body parts suffering the impact (134, with the 12SG→3 past -t suffix), while in its
¹⁴⁷⁷¹ intransitive use as in (135) no body part is specified.

- ¹⁴⁷⁷² (134) *a-ku kum wi-taꝝ ky-nui-rpu-t-a*
¹⁴⁷⁷³ 1SG;POSS-head door 3SG.POSS-on AOR-AUTO-bump.into-PST:TR-1SG
¹⁴⁷⁷³ ‘I bumped my head against the (top frame of the) door.’ (elicited)
- ¹⁴⁷⁷⁴ (135) *maka zo mui-ky-rpu-a tce mui-ty-nuymaz-a*
¹⁴⁷⁷⁵ AT.ALL EMPH NEG-AOR-bump.into-1SG LNK NEG-AOR-be.wounded-1SG
¹⁴⁷⁷⁵ ‘I did not hit (the bottom) and was not injured.’ (150824 kelaosi-zh, 190)

¹⁴⁷⁷⁶ When transitively conjugated, *rpu* ‘bump into’ does not have a causative mean-
¹⁴⁷⁷⁷ ing ‘cause X to bump into Y’ (the causative *sui-rpu* is used for this meaning). Al-
¹⁴⁷⁷⁸ though one could be tempted to translate *rpu* ‘bump into’ in this way in examples
¹⁴⁷⁷⁹ like (136) (‘I caused my bracelet to knock on the tripod’), here the bracelet, which
¹⁴⁷⁸⁰ is worn on the body, is construed as an extended part of the body (note the autive,
¹⁴⁷⁸¹ which conveys both the meaning of non-volitionality and of action affecting the
¹⁴⁷⁸² subject, §19.1.3, §19.1.4).

- ¹⁴⁷⁸³ (136) *azo a-zgros sq^hi wi-taꝝ ku-nui-rpe-a*
¹⁴⁷⁸⁴ 1SG 1SG.POSS-bracelet tripod 3SG.POSS-on IPFV-AUTO-bump[III]-1SG
¹⁴⁷⁸⁴ *ndža cti*
¹⁴⁷⁸⁴ reason be.AFF:FACT
¹⁴⁷⁸⁵ ‘This is because (I accidentally made) my bracelet clang against the
¹⁴⁷⁸⁶ tripod.’ (tWxtsa 2003, 52)

14.5.3 Semi-transitive labile verbs

14788 The verb *syo* ‘listen’ can be conjugated transitively or intransitively, but selects
 14789 a semi-object in the second case. In addition, its meaning and the orientation
 14790 preverbs it selects are different depending on its valency.

14791 In the intransitive conjugation, *syo* means ‘listen’ and selects the orientation
 14792 ‘towards west’, as in (137) (without Stem III alternation). In (138), it occurs with
 14793 the semi-object *w-skrt*.

- 14794 (137) *nui-syo je*
 IMP-listen SFP
 14795 ‘Listen!’ (140516 guowang halifa-zh, 76)

- 14796 (138) *pγyŋlaš nuanu w-skrt nui-kui-syo tce*
 pheasant DEM 3SG.POSS-voice IPFV-GENR:S/O-listen LNK
 14797 *saxsyl ma ky-mto rkun*
 be.obvious:FACT a.part.from OBJ:PCP-see be.rare:FACT
 14798 ‘The pheasant, one can recognize its presence by listening to its voice,
 14799 but it is rarely seen.’ (23-pGAYaR, 39)

14800 This verb can also take a complement clause as semi-object, and can refer to
 14801 perceptions other than hearing, as in (139) (see also §15.1.5.9).

- 14802 (139) *nx-ŋga nui-rtaš ci müj-rtaš kui nui-syo*
 2SG.POSS-clothes SENS-be.enough QU NEG:SENS-be.enough SFP IMP-listen

14803

14804 ‘Make sure (literally ‘feel whether’) you have enough clothes.’ (elicited)

14805 With transitive valency, *syo* selects the orientation ‘towards east’, and means
 14806 ‘obey, listen to’, as in (140).³⁵

- 14807 (140) *tce a-mu a-wa ra ka-syo tce*
 LNK 1SG.POSS-mother 1SG.POSS-father PL AOR:3→3'-obey LNK
 14808 *lx-ari tce,*
 AOR:UPSTREAM-go[II] LNK
 14809 ‘He listened to my parents and went there.’ (14-siblings, 219)

14810 The transitive *syo* has an antipassive form *syyo* ‘be obedient’ (from ‘listen
 14811 to people’) as in (141), which is not labile, unlike its base verb.

³⁵In example (140), the C-type orientation preverb show that the verb is transitive (§14.3.1).

- 14812 (141) <*xiaoqian*> *nur wuma zo tc^heme nur-pe,*
 ANTHR DEM really EMPH girl SENS-be.good
 14813 *nur-sy-syŋo,*
 SENS-APASS:HUM-listen
 14814 ‘Xiaoqian is a very nice girl, she is obedient.’ (150907 niexiaoqian-zh, 166)

14815 Another type of labile semi-transitive verb is *rga*, which can either be semi-
 14816 transitive or intransitive stative (without semi-object). It means ‘like’ when semi-
 14817 transitive as in (142), with a meaning close to its own applicative derivation
 14818 (§17.4.1), and ‘be happy’ when stative intransitive, as in (143).

- 14819 (142) *icq^ha tumja nur c^ha pjy-rga q^he*
 the.aforementioned arrow DEM alcohol IFR.IPFV-like LNK
 14820 ‘(Gesar’s) arrows like (to drink) alcohol.’ (Gesar, 352)
- 14821 (143) *bz̥ymi ni wuma zo pjy-rga-ndzi.*
 husband.and.wife DU really EMPH IFR.IPFV-be.happy-DU
 14822 ‘The husband and his wife were very happy.’ (140506 woju guniang-zh,
 14823 10)

14824 14.5.4 Ditransitive-monotransitive lability

14825 There are two subtypes of ditransitive-monotransitive lability in Japhug: secun-
 14826 dative-monotransitive and indirective-monotransitive.

14827 Monotransitive-secundative lability is illustrated by verbs such as *çyrz* ‘give
 14828 back’, *fsuy* ‘repay (gratitude)’ and *srya* ‘give back’: they index as object either the
 14829 recipient or the theme, as shown by examples (144a) and (144b).³⁶

- 14830 (144) a. *nx-tʂunlyn nur-ta-fsuy ra*
 2SG.POSS-gratitude IPFV-1→2-repay be.needed:FACT
 14831 ‘I have to return the favour.’ (150827 tianluo-zh, 145)
- 14832 b. *nx-tʂunlyn nur-nur-fsuy-a*
 2SG.POSS-gratitude IPFV-AUTO-repay-1SG
 14833 ‘I will return the favour.’ (elicited, adapted from example 144a)

14834 Indirective-monotransitive lability is more common: this phenomenon refers
 14835 to verbs which optionally take an oblique goal argument similar to that of in-
 14836 transitive verbs (§14.2.4). Typical examples include allative verbs of manipulation

³⁶The autive is optional in (144b).

14837 (§15.1.2.2) such as *yut* ‘bring’ or *tsum* ‘take away’, which are often found with ab-
 14838 solutive or locative postpositional phrases expressing the goal of the motion as
 14839 in (145), but also commonly occur without any locative argument (146).

- 14840 (145) *rjylpu nuu kuu tuturca k^ha ui-ŋgw^u jó-wy-tsum-ndzi*
 king DEM ERG together house 3SG.POSS-in IFR-INV-take.away-DU
 14841 ‘The king brought them together into a house.’ (140505 liuhaohan
 14842 zoubian tianxia-zh, 142)

- 14843 (146) *juymur ndyre ny-rca tu-kuu-tsum-a*
 this.evening LNK 2SG.POSS-following IPFV:UP-2→1-take.away-1SG
 14844 *ra*
 be.needed:FACT
 14845 ‘This evening, take me with you (to heaven).’ (07-deluge, 48)

14.6 Additional questions on the generic and number indexation

14846 The previous sections focused on person and number indexation in relation to
 14847 verb argument structure. This section discusses some properties of number and
 14850 generic indexation that are observed on both intransitive and transitive verbs.

14.6.1 Agreement mismatch

14851 This section investigates various types of mismatch between person indexation
 14852 on the verb and nominal and pronominal elements in the clause: optional num-
 14853 ber indexation, honorific plural, partitive indexation and the interaction between
 14854 first person and generic person. There are two additional types of indexation mis-
 14855 match not discussed here: hybrid indirect speech (§24.2.5.2), and affixal chains
 14856 in bipartite verbs (§11.6.3).

14.6.1.1 Optional number indexation

14857 The default situation in Japhug is for the third person core arguments to be in-
 14858 dexed in number on the verb in intransitive or non-local configurations (the num-
 14859 ber of the subject in direct configurations, and that of the object in inverse con-
 14860 figurations, §14.3.2.2). This is the case in particular in series of verbs sharing the
 14861 same subject, as in example (147) with dual (3DU→3' or 3DU intransitive) indexa-
 14862 tion on five verbs in a row, referring to the same pair of persons.

- 14865 (147) *tcendyre <yinlia> to-nui-ndo-ndzi, kyndza ra to-nui-ndo-ndzi q^be,*
 LNK drink IFR-AUTO-take-DU food PL IFR-AUTO-take-DU LNK
 14866 *qrŋŋgry w-t^hcu tce, to-nuna-ndzi qhe,*
 TOPO 3SG.POSS-downstream LOC IFR-rest-DU LNK
 14867 *jŋ-nŋmpole-ndzi q^be, tce ko-nui-yi-ndzi*
 IFR-do.sightseeing-DU LNK LNK IFR:EAST-VERT-come-DU
 14868 ‘The two of them took with them drinks and food, and rested and did
 14869 sightseeing further down from Qrangak, and then came back.’
 14870 (conversation 140510)

14871 However, non-singular third person core arguments do not necessarily trigger
 14872 number indexation in all cases. Several syntactic, semantic and discourse factors
 14873 interfere with number indexation.

14874 With existential verbs, number indexation of the subject is nearly always ob-
 14875 served in the case of human referents in the existential construction, even in the
 14876 case of collective nouns without number markers, such as the counted noun *tua-*
 14877 *tupu* ‘one household’ in (148). Dual or plural indexation is generally observed
 14878 when the subject has a numeral modifier, as in (149).

- 14879 (148) *unumutcu tua-tupu pjy-tu-nui*
 DEM:LOC ONE-household IFR.IPFV-exist-PL
 14880 ‘there was one household there.’ (140512 yufu yu mogui-zh, 3)
- 14881 (149) *kyndzi-xtryχsum pjy-tu-nui*
 COLL-brother three IFR.IPFV-exist-PL
 14882 ‘There were three brothers.’ (31-deluge, 7)

14883 On the other hand, with inanimate referents, number indexation is rarely found;
 14884 in (150) for instance, no dual indexation is found on the verb despite the numeral
 14885 *ɛnuz* ‘two’.

- 14886 (150) *nunureri ts^hko ɛnuz tu.*
 DEM:LOC stone.mount two exist:FACT
 14887 ‘There are two stone mounts there.’ (140522 Kamnyu zgo, 138)

14888 In the possessive construction (§8.2.3.1, §22.5.2), however, the subject of exis-
 14889 tential verbs (the possesum) rarely triggers number indexation, even in the case
 14890 of human referents: compare for instance in (151) the first verb form *pjy-tu-ndzi*
 14891 (existential construction with dual indexation) vs. the second one *pjy-tu* (posse-
 14892 sive construction with plural possesum, no indexation).

- 14893 (151) *kucunguu tce, bz̥ymi ci pjy-tu-ndzi tce,*
 long.ago LOC husband.and.wife INDEF IFR.IPFV-exist-DU LNK
 14894 *ndzi-tcui x̥sum pjy-tu.*
 3DU.POSS-son three IPFV.IPFV-exist
 14895 ‘Long ago, there was a husband and his wife, and they had three sons.’
 14896 (140430 jin e-zh, 2)

14897 With dynamic verbs, as in the existential construction, core arguments gene-
 14898 rally triggers number indexation when they have animate referents. This is in
 14899 particular the case with the adverb *tuturca* ‘together’ (§8.3.2), even to describe
 14900 group actions where all individuals act exactly in the same way as in (152).

- 14901 (152) *tce lx-zo-nuu kuny tuturca lu-zo-nuu,*
 LNK AOR:UPSTREAM-land-PL also together IPFV:UPSTREAM-land-PL
 14902 *tʰui-nuqambumbjom-nuu kuny tuturca cʰui-nuqambumbjom-nuu,*
 AOR:DOWNSTREAM-fly-PL also together IPFV:DOWNSTREAM-fly-PL
 14903 ‘When they land they all land together, when they fly they all fly
 14904 together.’ (24-qro, 10)

14905 Number indexation is optional with *tuturca* ‘together’ in the case of inanimate
 14906 referents (including plants). Examples (153a) and (153b) from the same text shows
 14907 verb forms with and without plural indexation in the same context (referring to
 14908 a species of mushroom).

- 14909 (153) a. *tuturca kui-duu~dyn tu-lor-nuu nyu.*
 together SBJ:PCP-EMPH~be.many IPFV-come.out-PL be:FACT
 14910 ‘They grow together in great numbers.’ (21-jmAGni, 82)
 b. *kui-duu~dyn zo tuturca tu-lor nyu.*
 SBJ:PCP-EMPH~be.many EMPH together IPFV-come.out be:FACT
 14912 ‘They grow together in great numbers.’ (21-jmAGni, 84)

14913 Optional number indexation is however also attested, though uncommon, with
 14914 dynamic verbs in reference to humans, as in (154), where verb ‘die’ occurs with-
 14915 out plural indexation in its first occurrence (just after a possessive construction,
 14916 where indexation on the existential verb *tx-tu* is not found either), and with the
 14917 plural suffix *-nuu* in the second occurrence.

- 14918 (154) *wi-rjít kunguit t̪-tu ri, kuitṣyy nur-si. kuitṣyy*
 3SG.POSS-child nine AOR-exist LNK six AOR-die six
 14919 *nur-si-nuu qʰe*
 AOR-die-PL LNK
 14920 ‘She had nine children, six (of them) died. Six died, and...’ (14-siblings,
 14921 17-18)

14922 The conditions for optional number indexation of human referents with dy-
 14923 namic verbs are not completely clear. Absence of number indexation is rare in
 14924 intransitive and direct forms, and may be due in part to speech errors (§14.6.1.5).

14925 With generic human subjects, the indexation of the number of the object,
 14926 though attested (§14.3.2.5), is not common. For instance in (155), despite an overt
 14927 dual object, the verb lacks number indexation.

- 14928 (155) *kündzi-si ni s-cʰú-wy-qru* *ŋu*
 14929 COLL-sibling DU TRAL-IPFV:DOWNSTREAM-INV-welcome be:FACT
 ‘Let’s invite the two brothers down here.’ (Nyima wodzer2003-2, 115)

14.6.1.2 Plural as honorific

14931 Plural marking on nouns (§9.1.1.3) and pronouns (§6.1.1) can be used to express
 14932 singular honorific in Japhug. Similarly, honorific plural indexation is found with
 14933 second (156) or third (157) person referents, with or without plural *ra* marking on
 14934 the noun. Honorific plural is mainly attested in traditional stories, but it is still
 14935 used to address lamas.

- 14936 (156) *a-txčime ra, ci pui-yuutsʰyduay tce, kx-nuu-rŋguu-nuu*
 14937 1SG.POSS-lady PL a.little SENS-be.hot LNK IMP-AUTO-lie.down-PL
 ‘My lady, it is a bit hot, lie down (to sleep).’ (2014-kWLAG, 232)
- 14938 (157) *tceri tx-mu nuu kuu rjylpu ra mx-ryži-nuu tce,*
 14939 LNK INDEF.POSS-mother DEM ERG king PL NEG-stay:FACT-PL LNK
pyxtciu nuu pjx-sui-sat.
 14940 bird DEM IFR-CAUS-kill
 14941 ‘The woman had the bird killed while the king was away.’ (2014-kWLAG,
 590)

14942 Honorific plural indexation on the noun does not always correlate with plural
 14943 indexation on the verb, as in (158), where the verb has a singular form.

- 14944 (158) *wō a-zi ra t^čindzā pūr-tu-nv̥re nyu*
INTERJ 1SG.POSS-young.lady PL why IPFV-2-laugh be:FACT
14945 ‘My lady, why are you laughing?’ (2005 Kunbzang, 245)

14946 **14.6.1.3 Partitive indexation**

14947 Number indexation with a with first person core argument, unlike that of second
14948 and third person, is compulsory.

14949 Apparent examples of mismatch however do exist, but are confined to a very
14950 specific partitive use of dual or plural number (Bickel 2000). With the interrogative
14951 pronoun *cui* ‘who’ (§6.5.2), in particular, indexation on the verb can be non-
14952 singular with the specific partitive meaning ‘who among X’, in particular in com-
14953 parative constructions as in (159), with 1DU indexation on the verb although this
14954 sentence implies that only one of the two sisters is the most beautiful (see §26.2.1
14955 on this comparative construction, and Jacques (2016b) and §8.2.2.7 on the use of
14956 the ergative here).

- 14957 (159) *a-βi, nyki t^če^hi t^če, tu-či*
1SG.POSS-younger.sibling FILLER downstream LOC INDEF.POSS-water
14958 *w-ŋgii c-pu-ru t^če, cui kui*
3SG.POSS-inside TRAL-IMP:DOWN-look LNK who ERG
14959 *pui-mpcyr-tci kui?*
SENS-be.beautiful-1DU SFP
14960 ‘Sister, go and look down there in the water, who is the most beautiful of
14961 us?’ (2014-kWLAG, 477)

14962 Similarly, non-singular indexation on the verb with a counted noun core argument
14963 can have a partitive meaning, for instance *tui-rdoš* ‘one piece’ (§7.3.2.1)
14964 with plural *-nu* on the verb in (160) can only be interpreted as meaning ‘one of
14965 them should take it’.

- 14966 (160) “*tui-rdoš kui a-sci a-t^ču-ndo-nu nts^hi*”
one-piece ERG 1SG.POSS-instead IRR-PFV-take-PL be.better:FACT
14967 *nui-susym pjv-nyu*
IPFV-think[III] IFR.IPFV-be
14968 ‘(The king) was thinking: ‘One of (my sons) should inherit the throne.’
14969 (140510 sanpian yumao-zh, 7)

14970 Another type of partitive indexation is the use of 1PL pronouns with third
14971 person indexation, as in (161), with two verbs in 3PL→3 form and the 1PL pronoun
14972 in topicalized position meaning ‘some among us’.

- 14973 (161) *izora tce cky^hyr tu-ti-nu_i tsuku ku_i ckyjwab tu-ti-nu_i*
 1PL LNK wild.chives IPFV-say-PL some ERG wild.chives IPFV-say-PL
 14974 *ŋu ma*
 be:FACT LNK
 14975 ‘Among us, some call it *cky^hyr*, some *ckyjwab*.’ (07-Cku, 82)

14.6.1.4 First person and generic person

14977 Another type of agreement mismatch observed with first person concerns 1PL
 14978 and generic person. Before examining the examples of mismatch between pro-
 14979 nouns and verb indexation in Japhug, it is important to note that generic person
 14980 often occurs in gnomic statements applying to the speaker himself (§14.6.2), and
 14981 can be used as an indirect way to express a first person, as has been described
 14982 in some Kiranti languages (Bickel & Gaenszle 2015). It is even found in contexts
 14983 where it unambiguously refers to the first person *singular*, as in (162).

- 14984 (162) *my-xsi ko, nu_i jnx-nu_i-jmuit-a*
 14985 NEG-GENR:know SFP DEM:PL IFR-AUTO-forget-1SG
 14986 ‘I don’t know, I forgot about these things.’ (phone conversation,
 2013-12-24)

14987 Generic inverse Imperfective verb forms with modal verb such as *nts^{hi}* ‘be bet-
 14988 ter’ or *ra* ‘be needed’ (example 163) or even without auxiliary (164) is a common
 14989 way to express 1PL hortative (§21.2.4, §21.2.5), and in such contexts 1PL pronouns
 14990 or possessive prefixes can be found.

14991 In (163), generic inverse marking on the verb corresponds to the 1PL possessive
 14992 on the object *nu_iŋa* ‘cow’. The presence of the autive *nu-* (§19.1) is a further clue
 14993 to the equivalence of the generic subject and the 1PL in this example.

- 14994 (163) *skalpa ndzury nu_i nu-ŋu tce, ji-nu_iŋa*
 14995 world be.destroyed:FACT DEM SENS-be LNK 1PL.POSS-cow
pjú-wy-nu_i-ntc^ha nu-nts^{hi}
 14996 IPFV-INV-AUTO-butcher SENS-be.better
 ‘The world is about to be destroyed, let us kill our cow.’ (07-deluge, 7)

14997 In (164), the 1PL pronoun *izo* directly co-occurs with a verb in transitive subject
 14998 generic form (§14.3.2.5).

- 14999 (164) *izo kui-mvku pŷjkʰu, u-cya kui-mtcos nuu ci*
 1PL SBJ:PCP-be.first still 3SG.POSS-tooth SBJ:PCP-be.sharp DEM a.little
 15000 *pú-wy-pʰut*
 IPFV-INV-take.out
 15001 ‘Let us first take out its sharp teeth.’ (150908 menglang-zh, 80)

15002 Co-occurrence of generic indexation with a 1PL pronoun is also found in pro-
 15003 ceudural texts; in such contexts the 1PL pronouns occur in apposition with place
 15004 names (§5.2.1), ethnic groups or classes of people, for instance *izo kuruu ra* ‘we
 15005 Tibetans’ in (165).

- 15006 (165) *izo kuruu ra, nykinu, qajyi lú-wy-nuu-βzu tce*
 1PL Tibetan PL FILLER bread IPFV-INV-AUTO-make LNK
 15007 ‘We Tibetans, when we make bread,’ (160706 thotsi, 1)

15008 The opposite situation, a generic pronoun in combination with 1PL indexation,
 15009 is much rarer, but also attested. For instance, in (166), the adjectival stative verb
 15010 *xtci* ‘be small’ bears 1PL -j suffix, but the corresponding overt pronoun in the
 15011 sentence is the generic person *tuzyra* ‘one’ (§6.2.1). The generic form *pui-kui-xtci*,
 15012 as in (167) would be possible in the exactly the same context, clearly including
 15013 the first person.

- 15014 (166) *tuzyra pui-xtci-j tce,*
 GENR PST.IPFV-be.small-1PL LNK
 15015 ‘When we were young.’ (17-ndZWnW, 52)

- 15016 (167) *tce jinde aj pui-mto-t-a me ri,*
 LNK now 1SG AOR-see-PST:TR-1SG not.exist:FACT LNK
 15017 *pui-kui-xtci tce pú-wy-mto*
 PST.IPFV-GENR:S/O-be.small LNK AOR-INV-see
 15018 ‘I have not seen any (wild crane) recently, but when we were young, we
 15019 did see it.’ (22-qomndroN, 35)

15020 Dual or plural indexation can occur with generic transitive subject indexation
 15021 marking a first person, as in example (55) in §14.3.2.5.

15022 In addition to the generic person, the proprietive derivation is another possible
 15023 strategy to indirectly refer to the first person (§18.8.2).

15024 14.6.1.5 Indexation mismatch and speech errors

15025 Speech errors are inevitable in any corpus, and are a factor to take into consideration
 15026 to explain inconsistencies in person indexation.

15027 The clearest examples of erroneous indexation are self-corrections. In (168)
 15028 for instance, the speaker first chooses a plural 3PL→3' with *-nu* suffix and then
 15029 corrects herself to the appropriate form 3SG→3' *no-ta*. The error here is due without
 15030 doubt to the presence of the overt object *bzunuu tc^hemyli ra* bearing a plural
 15031 marker: plural objects in non-local configuration are only indexed in the case of
 15032 inverse forms (§14.3.2.2), but examples of this type show that speakers may nevertheless
 15033 be tempted to index them in direct configurations too (as if the verb
 15034 were intransitive).

- 15035 (168) *bzunuu tc^hemyli ra, no-ta-nu tce, no-ta tce,*
 young.man young.woman PL IFR-put-PL LNK IFR-put LNK
 15036 ‘She left (there) the young men and women.’ (2003kandzWsqhaj, 35)

15037 In (169) from a text translated from Chinese, Tshendzin realised that the number
 15038 of daughters was different from what she had remembered, and hesitated
 15039 between the dual and the plural on the indexation of the intransitive verb *nyrura*
 15040 ‘look around’.

- 15041 (169) *oma, kuβde pjy-su-ye ny! kuβde pjy-su-ye*
 INTERJ four IFR:DOWN-CAUS-come SFP four IFR:DOWN-CAUS-come
 15042 *q^he, nunwra pjy-nyrura-ndzi ri, pjy-nyrura-nu ri,*
 LNK DEM:PL IFR:look.around-DU LNK IFR:look.around-PL LNK
 15043 ‘He sent four (of his daughters, not three), he sent four of them, and they
 15044 looked around.’ (150826 baoliandeng-zh, 223)

15045 Without self correction, indexation errors are less obvious and have to be
 15046 rechecked with a native speaker. In (170), the first verb *l^h-wy-çaf-ndzi* has inverse
 15047 marking (§14.3.3.2) and indexes the non-overt object (the youngest daughter and
 15048 her husband). The second (intransitive) verb has dual indexation, but its subject
 15049 is coreferent with that of the previous verb (*u-pi ra* ‘her elder sisters etc’) and
 15050 plural indexation would therefore be expected here, and Tshendzin indeed pro-
 15051 poses to correct the verb form to *k^h-ak^hu-nuu* AOR-call-PL. The confusion between
 15052 dual and plural here is a combination of two factors: the presence of a verb with
 15053 dual indexation just before (indexation attraction), and the ambiguity of the sub-
 15054 ject: the youngest sister has two eldest daughters (the plural here refer to her
 15055 husbands and servants), and one could construe the subject of *k^h-ak^hu-ndzi* as

referring only to the two elder sisters, without the additional people, hence the dual indexation.

- (170) *ndyre uu-pi* *ra kuu l̥-wy-caβ-ndzi* *ny*
 LNK 3SG.POSS-elder.sibling PL ERG AOR:UPSTREAM-INV-catch.up-DU LNK
 kx-ak^hu-ndzi puu-ŋu.
 AOR-call-DU SENS-be
 ‘Her elder sisters and the others caught up with them and called.’ (2005
 Kunbzang, 155)

Some apparent cases of optional number indexation (§14.6.1.1) should also be analyzed as speech errors, as in (§14.6.1.1), where the first verb *jy-ye-ndzi* bears correct dual indexation, but the second one lacks it, presumably due to hesitation on the part of the speaker.

- (171) *nunuu kuu-fse* *vnuz jy-ye-ndzi* *tce, ji-k^ha* *zuu*
 DEM SBJ:PCP-be.like two AOR-come[II]-DU LNK 1PL.POSS-house LOC
 jy-ye *tce*
 AOR-come[II] LNK
 ‘Two (ghosts) like that came, came to our house.’ (150902 qixian-zh, 139)

14.6.2 Generic person vs. 3PL indexation

In Japhug, both generic marking (§14.3.2.5) and third person plural indexation can be used to express generic referents. In particular, both can agree with the generic/indefinite noun *turme* ‘person’ (§6.2.2), as illustrated by examples (172)³⁷ and (173).

- (172) *nuŋa ra tci kx-ndza rga-nu,* *turme kuu tú-wy-ndza*
 cow PL ERG INF-eat like:FACT-PL people ERG IPFV-GENR:A-eat
 my-sna.
 NEG-be.good:FACT
 ‘Cows like to eat it, but it is not good for people.’ (11-paRzwamWntoR,
 39-40)

³⁷The generic transitive subject marker is the inverse prefix (§14.3.2.5). In this section, it is however glossed as GENR:A for clarity.

14.6 Additional questions on the generic and number indexation

- 15078 (173) *tce lulu nuu wuma zo pe tce, numuu, turme ra kuu nuu*
 LNK cat DEM really EMPH be.good:FACT LNK DEM people PL ERG DEM
 15079 *nur-rga-nuu tce*
 APPL-like:FACT-PL LNK
 15080 ‘The cat is a very nice (animal), people like it.’ (21-lWLU, 41)

15081 The aim of this section is to examine the semantic difference between generic
 15082 person vs. 3PL in contexts like those illustrated by the examples above.

15083 Generic indexation (§14.3.2.5) is most commonly used to express general or
 15084 gnomic statements applying to most humans, including the speaker. No more
 15085 than one argument in a particular sentence can be generic: In particular, it is not
 15086 possible to have both generic subject and object on the same verb form (§5.1.3
 15087 and §6.2.1), except in reflexive constructions (example 15, §6.2.1).

15088 There is obligatory agreement between all generic person markers, whether in-
 15089 dexation on the verb, pronouns or possessive prefixes inside a clause, and across
 15090 contiguous clauses. In (174) for instance, the generic intransitive subject of the
 15091 verb *mui~my-pui-kui-tso* is coreferent with the transitive subject of *my-wy-mto*.

- 15092 (174) *tce wuma zo mui~my-pui-kui-tso ny*
 LNK really EMPH COND~NEG-PST.IPFV-GENR:S/O-know LNK
 15093 *my-wy-mto*
 NEG-GENR:A-see:FACT
 15094 ‘If you do not know it well, you won’t see it.’ (07-Cku, 59)

15095 In (175), the generic possessor prefix on *tu-laxtcʰa* is also coreferent with the
 15096 object of *nuu-kuu-nusukʰo* ‘they rob people of X’. Note however in this example
 15097 that the generic person on *tu-kuu-nykʰe* is not exactly identical to the referent of
 15098 the previous verb, referring to a subset of it (only women).

- 15099 (175) *turme pjuu-sat-nuu, tuu-laxtcʰa nuu-kuu-nusukʰo, tcʰeme tce*
 people IPFV-kill-PL GENR.POSS-thing IPFV-GENR:S/O-rob woman LNK
 15100 *tu-kuu-nykʰe kuu-fse nuu-ηu*
 IPFV-GENR:S/O-bully SBJ:PCP-be.like SENS-be
 15101 ‘They did things like killing people, robbing people’s things, raping
 15102 women.’ (17-lhazgron, 25-26)

15103 Example (176) show the agreement between the generic pronoun *tuuzo* ‘one’
 15104 and generic marking on the verb.

- 15105 (176) *tuazo tu-kw-ruacmi naura w-núr-tso?*
 GENR IPFV-GENR:S/O-speak DEM:PL QU-SENS-understand
 15106 ‘Does (you son) understand when people speak?’ (phone conversation
 15107 15-01-13)

15108 Generic human marking can sometimes be used as a substitute for first person,
 15109 both as indexation prefix (§14.6.1.4) or as possessive prefix (§5.1.3.1). Example (177)
 15110 illustrates this function.

- 15111 (177) *tceri ty-pytso puu-kui-ŋu tce, nur ky-ndza wuma*
 LNK INDEF.POSS-child PST.IPFV-GENR:S/O-be LNK DEM INF-eat really
 15112 *zo puu-kui-rga.*
 EMPH PST.IPFV-GENR:S/O-like
 15113 ‘When we were children, we used to like eating it a lot.’ (12-ndZiNgi,
 15114 138)

15115 The commonality between all the uses of generic person marking is that it
 15116 always refers to a group including the speaker.³⁸ It is particularly clear in (175),
 15117 where the generic prefix *ku-* on *tu-kui-nvk^he* is coreferent with the overt object
 15118 *tc^heme* ‘woman’; this verb form is appropriate in this particular instance because
 15119 the speaker is a woman, and *tc^heme* ‘woman’ is used here as a generic noun.

15120 Example (178) further illustrates the same phenomenon. The speaker, also a
 15121 woman, includes herself among the potential Jews’ harp players (though she has
 15122 never played the instrument) and thus employs generic subject marking on the
 15123 first verb (note also the presence of the 1PL pronoun, §14.6.1.4). Conversely, she
 15124 excludes herself from potential flute players (traditionally, only men) and selects
 15125 3PL marking on the second verb.

- 15126 (178) *kuucunŋua tce, izora tc^heme kuu zNGro nút-wy-lvt,*
 long.ago LNK 1PL girl ERG Jews’.harp IPFV-GENR:A-release
 15127 *ty-tcuu ra kui juli c^huu-lvt-nuu.*
 INDEF.POSS-boy PL ERG flute IPFV-release-PL
 15128 ‘Long ago, among us women used to play the Jews’ harp, while men
 15129 used to play the flute.’ (150907 ZNGro, 10)

15130 This example is typical of procedural texts: the generic is consistently used by
 15131 women speakers to refer to activities typically performed by women, and the 3PL
 15132 for men’s duties (and vice-versa with men speakers).

³⁸Example (176) above could seem to be a counterexample, but the question here is about the ability to understand speech in general, not restricted to the people in contact with my son at the moment this question was uttered.

15133 This contrast is also found when discussing differences between Tibetan and
 15134 Chinese people, in particular the names given to animals and plants. In (179),
 15135 Chinese are referred to collectively in the 3SG (the plural would also be possi-
 15136 ble in the same context), while Tibetans (the ethnic group to which the speaker
 15137 associates herself) are indexed on the verb by the generic *kua-* prefix (§14.3.4).

- 15138 (179) *nunuu kupa kua <gouweicao> tu-ti nyu tce, kuruu ra kua*
 DEM Chinese ERG setaria.viridis IPFV-say be:FACT LNK Tibetan PL ERG
 15139 *nuu li khunajme tu-kua-ti nyu tce,*
 DEM again setaria.viridis IPFV-GENR-say be:FACT be:FACT LNK
 15140 ‘The Chinese call it ‘gouweicao’, Tibetans call it *khunajme*.’
 15141 (16-RIWmsWsi, 54)

15142 The contrast between *kua-/wy-* generic person and 3PL indexation can thus be
 15143 described as *speaker-inclusive* vs. *speaker-exclusive* generic marking.

15144 Another crucial difference between speaker-inclusive generic and 3PL, is that
 15145 unlike the former, the latter can refer to several different referents in the same
 15146 sentence. In example (180) for instance, the 3PL on the verbs *a-mx-ty-ndo-nuu* ‘let
 15147 them not take it’ and *yuu-z-nyndry-nuu* ‘it will poison them’³⁹ agrees with the noun
 15148 phrase *turme ra*, which is to be interpreted as meaning ‘other people’ (§6.8) rather
 15149 than generic person (§6.2.2). Its referent is different from that of the generic 3PL
 15150 in the rest of the passage, such as the matrix verb *nuu-suoso-nuu* ‘they think that ...’
 15151 or the preceding verb *pjuu-rytcumtcau-nuu* ‘they stamp on it’.

- 15152 (180) *tce syndry tu-ti-nuu nygryl tce*
 LNK be.poisonous:FACT IPFV-say-PL be.usually.the.case:FACT LNK
 15153 *a-puu-suysyl-nuu bo tce maka mx-p^hut-nuu,*
 IRR-PFV-recognize-PL ADVERS LNK at.all NEG-take.out:FACT-PL
 15154 *na-phut-nuu kuny c^huu-βde-nuu cti tce*
 AOR:3→3'-take.out-PL even IPFV-throw.away-PL be.AFF:FACT LNK
 15155 *pjuu-rytcumtcau-nuu ma ‘turme ra kua a-mx-ty-ndo-nuu ma*
 AOR-tread-PL LNK people PL ERG IRR-NEG-PFV-take-PL LNK
 15156 *yuu-z-nyndry-nuu’ nuu-suoso-nuu.*
 INV-CAUS-be.poisoned:FACT-PL SENS-think-PL
 15157 ‘People say that (this species of mushroom) is poisonous. If they
 15158 recognize it, they don’t pick it up, even if they pick it up they throw it

³⁹The inverse on this verb does mark generic subject (§14.3.2.5), since the subject of this verb is the poisonous mushroom. Rather, it occurs here to indicate a transitive configuration with inanimate subject and animate object (§14.3.3).

15159 away and stamp on it, thinking ‘(This way) other people won’t take it
 15160 and it will not poison them.’ (23-grWBgrWBftsa, 23-27)

15161 14.7 Person indexation on non-finite predicative words

15162 Despite being a highly verb-prominent language, Japhug has some non-verbal
 15163 predicates (§22.3). There is evidence that a few nominals occurring as predicates,
 15164 including nominalized verb forms and nouns, have acquired person indexation
 15165 markers.

15166 Phenomena of this type are uncommon, but clear examples do exist in Indo-
 15167 European (Pott 1859: 414). For instance, in Greek, the adverbs δεῦρο ‘hither’ and
 15168 τῇ ‘here, take it’ have developed the plural forms δεῦτε and τῆτε, with the plural
 15169 present imperative suffix -τε (and unexplainable loss of the syllable -po in δεῦτε),
 15170 by contamination with imperative verb forms (φέρε, φέρετε), which occur in the
 15171 same contexts (Viti 2015: 113–114). A similar case is found in Gothic, where the
 15172 adverb *hiri* ‘hither’ (which incidentally translates Greek δεῦρο) has dual *hirjats*
 15173 and plural *hirjib*, modelled on imperatives (Braune 1953: 104).

15174 Inflectionalization of nominals is attested in the case of a few phatic (§14.7.1)
 15175 and exclamative (§14.7.2) expressions in Japhug.

15176 14.7.1 Phatic expressions

15177 The expression *syrma* ‘good night’, used to address someone leaving one’s house
 15178 in the evening, transparently derives from the oblique participle *sx-rma* ‘place
 15179 where/time when one stays overnight’ (§16.1.3) from the verb *rma* ‘stay the night,
 15180 live’, as illustrated by example (181).

15181	(181) <i>tce w-sx-rma</i>	<i>nunshi, prax, pravpa tce</i>
	LNK 3SG.POSS-OBL:PCP-stay.the.night	DEM cliff cavern LNK
15182	<i>c-ku-rma</i>	<i>juu-juu</i>
	TRAL-IPFV-stay.the.night	SENS-be
15183	'The place where its spends the night is the cliffs, it goes to spend the	
15184	night in caverns under the cliffs.' (20-xsar, 36)	

15185 This expression is probably the abbreviation of a phrase such as ‘go back to
 15186 your resting place’ (which would be *nr-syrma jx-nuče*).

15187 Yet, when addressing more than one person, the dual form *syrma-ndži* and the
 15188 plural *syrma-nu* are used, with the 2/3 dual *-ndži* and plural *-nu* suffixes found in
 15189 verb paradigms (§14.2.1.2). These suffixes normally only appear on finite verbs.

15190 The forms *syrma*, *syrma-ndzi* and *syrma-nu* could in principle be analyzed as a Factual Non-Past form (§21.3.1.1), but there are three problems with this hypothesis.

15192 First, the meaning of the expression ('have a good night') is hardly compatible
15193 with the Factual Non-Past; an Imperative or Irrealis form would be expected
15194 instead, and a second person prefix *tu-* would in any case be required. Second,
15195 while there are several *sy-* verbal derivational prefix, none of them (propriative
15196 §18.8.1, antipassive §18.6.2 and causative §17.2.1.3) has a function which could ac-
15197 count for a derivation such as 'spend the night' ⇒ '(have a) good night'. Third, no
15198 other verb forms (including first or third person), finite or non-finite, are attested
15199 for *syrma*.

15200 A more promising approach to account for these verb forms is analogy with
15201 other phatic expressions involving finite verb forms. The most probable one is
15202 the verb *astu* 'be straight', whose Imperative is used to mean 'goodbye' (literally
15203 '(walk) straight') as in (182). These verb forms optionally occur with the sentence
15204 final particle *je* (§10.4.1), another commonality with *syrma* 'good night'.

- 15205 (182) a. *ty-ystu* (je)
15206 IMP-be.straight SFP
15207 'Goodbye' = '(walk) straight' (singular)
b. *ty-ystu-ndzi* (je)
15208 IMP-be.straight-DU SFP
15209 'Goodbye' (dual)

15210 The dual and plural forms of *syrma* 'good night' can thus be explained as trivial
four-part analogy as in Table 14.18.

Table 14.18: The dual/plural forms of *syrma* 'good night' as result of four-part analogy

<i>tyrstu</i> 'goodbye.SG'	<i>syrma</i> 'good night.SG'
<i>tyrstu-ndzi</i> 'goodbye.DU'	X ⇒ <i>syrma-ndzi</i> 'good night'

15211 The expression *krynyβdi* 'take care', used when leaving from someone's place,
15212 and which also has a dual *krynyβdi-ndzi* and a plural *krynyβdi-nu*, might also be a
15213 inflectionalized form of the *kry-* infinitive (§16.2.1) of the tropative *nry-* (§17.5) of
15214 the stative verb *βdi* 'be well, be good'.

15215 However, this case is less compelling than *syrma* 'good night', because *kry-nryβdi-ndzi*
15216 and *kry-nryβdi-nu* can alternatively be formally analyzed as imperatives with

15217 the EASTWARDS *ky-* preverb (§15.1.1.1), and because *nvβdi* is also found in regular
 15218 finite forms (as in 183).

- 15219 (183) *wi-ku-tuu-nvβdi?* *wi-ku-tuu-pe?*
 QU-PRS-2-feel.well QU-PRS-2-good
 15220 ‘Do you feel well, are you fine?’ (conversation, 16-12-28)

15221 **14.7.2 Exclamative expressions**

15222 The expression *duxpa* ‘poor ...’ seems at first glance to be a verb, as it not only
 15223 takes dual and plural suffixes (*duxpa-nu* ‘poor them’, example 184), but it can also
 15224 receive first person indexation (such as 1DU in 185). The variant form *zduxpa* is
 15225 also attested (see 25, §21.2.5).

- 15226 (184) *wo a-rjiti* *ra duxpa-nuu ma nuu wi-xtu*
 INTERJ 1SG.POSS-offspring PL poor-PL because DEM 3SG.POSS-belly
 15227 *wi-ŋgwi nuiteu yyzu-nuu rca*
 DEM:LOC exist:SENS-PL SFP
 15228 ‘My poor children, there are in his (the wolf’s) belly’ (140430 lang he
 15229 qizhi xiaoshanyang-zh, 130)

- 15230 (185) *tcizo ndy duxpa-tci ye, nv tcendyre, ky-ntcha*
 1DU on.the.other.hand poor-1DU SFP LNK LNK OBJ:PCP-kill
 15231 *wi-spa zo cti-tci*
 3SG.POSS-material EMPH be ASSERT:FACT-1DU
 15232 ‘We, on the other hand, poor of us! We are to be butchered.’
 15233 (kandZislama2003.210)

15234 Yet, *duxpa* has a defective paradigm: it cannot take any prefix, including the
 15235 second person *tuu-*, any TAM marker or any nominalization prefix. In addition, if
 15236 *duxpa* were to be analyzed as a verb, it would be anomalous, as it is borrowed
 15237 from Tibetan བྲྱྴ སྟୁଗ ପା ‘suffering’ (also spelled *sdug.ga*),⁴⁰ a nominalized form
 15238 taking the *-pa/-ba* suffix.

15239 While examples of verbs directly borrowed from Tibetan into Japhug are nu-
 15240 merous, at least in the earliest layer (for instance *rjuy* ‘run’, *βzjur* ‘change, cor-
 15241 rect’ etc, see Jacques 2019c), nouns or nominalized verbs borrowed from Tibetan
 15242 are never converted to verbs without denominal prefixes. Incidentally, we find in

⁴⁰For an account of the alternation between *p/b* and *g* in the spelling, see Hill (2011a) and the references therein.

15243 Japhug two verbs derived from the same Tibetan etymon (in the variant *zduuxpa*,
 15244 from an earlier layer of borrowing) by means of denominal prefixes, the intransitive
 15245 stative verb *sryzduuxpa* ‘be pitiful’ and the transitive verb *nuzduuxpa* ‘have pity
 15246 for’. The word *duuxpa* cannot be analyzed either as a verb derived from a noun by
 15247 zero-derivation, as zero denominal derivation does not exist in Japhug (§20.8.1).

15248 A better account of the defectiveness of *duuxpa* and its etymology is that it
 15249 originally was an exclamative noun (§5.1.2.8, §22.3), and that the third person and
 15250 first person indexation suffixes were added by contamination with finite stative
 15251 verbs used in exclamative sentences, as *sryzduuxpa* ‘be pitiful’ in (186).

- 15252 (186) *ndzi-yi ra, nuni mua-py-k-ytuy-nuu-ci,*
 3DU.POSS-relatives PL DEM:DU NEG-IFR-PEG-meet-PL-PEG
 15253 *pjy-sryzduuyupa-nu ma*
 IFR.IPFV-be.pityful-PL LNK
 15254 ‘Their relatives did not meet them (again), poor them.’
 15255 (2003zrantCWtWrme, 78)

15256 14.8 Historical perspectives

15257 This section explores a range of hypotheses to account for the synchronic resem-
 15258 blance between indexation markers (indexation suffixes, the inverse prefix and
 15259 the local scenario portmanteau prefixes) and other morphemes that are possibly
 15260 historically related in Japhug, drawing on comparative data from other Gyalrong
 15261 languages and beyond.

15262 14.8.1 Indexation suffixes, pronouns and possessive prefixes

15263 The indexation suffixes (§14.2.1) are similar to the corresponding possessive pre-
 15264 fixes (§5.1.1) and pronouns (§6.1) in Japhug, as shown by the data in Table 14.19. In
 15265 addition to the Kamnyu dialect, this table includes data on the Tatshi dialect (from
 15266 Lin & Luoerwu 2003, Lin 2011 and personal communication) between brackets.
 15267 The two dialects differ mainly in the presence of alveolo-palatal affricates in Kam-
 15268 nyu Japhug in the dual, while dental affricates are found in Tatshi.

15269 In the other Gyalrong languages, very similar affixes are found, as shown by
 15270 Table 14.20 (data from Sun 1998: 139, Sun 2017: 562, Gong 2014; 2018, Lin 1993:
 15271 168;198).

15272 The main differences between the indexation systems of the four Gyalrong
 15273 languages include the following observations: (i) only Situ has a 2SG suffix (in-

Table 14.19: Indexation suffixes, pronouns and possessive prefixes in Japhug

	Indexation suffix	Pronoun	Possessive Prefix
1SG	- <i>a</i>	<i>azo</i> (<i>ŋa</i>)	<i>a-</i>
2SG		<i>nŋzo</i>	<i>nŋ-</i>
3SG		<i>wzo</i> (<i>mi</i>)	<i>w-</i>
1DU	- <i>tci</i> (- <i>tsə</i>)	<i>tciزو</i>	<i>tci-</i> (- <i>tsə-</i>)
2DU	- <i>ndzi</i> (- <i>ndzə</i>)	<i>ndziزو</i>	<i>ndzi-</i> (- <i>ndzə-</i>)
3DU	- <i>ndzi</i> (- <i>ndzə</i>)	<i>zŋni</i>	<i>ndzi-</i> (- <i>ndzə-</i>)
1PL	- <i>ji</i>	<i>iزو</i>	<i>i-</i>
2PL	- <i>nui</i> (- <i>nə</i>)	<i>nuiزو</i>	<i>nui-</i> (- <i>nə-</i>)
3PL	- <i>nui</i> (- <i>nə</i>)	<i>zara</i>	<i>nui-</i> (- <i>nə-</i>)

Table 14.20: Indexation suffixes and possessive prefixes in Tshobdun, Zbu and Situ

	Tshobdun	Zbu	Situ
1SG	<i>p-</i>	- <i>aŋ</i>	<i>ŋa-/ŋə-</i>
2SG	<i>nŋ-</i>	<i>nŋ-</i>	<i>na-/nə-</i>
3SG	<i>o-</i>	<i>və-</i>	<i>wa-/wə-</i>
1DU	<i>tsə-</i>	- <i>tsə</i>	- <i>tçə</i> <i>ndʒa-/ndʒə-</i>
2/3DU	<i>"dzə-</i>	- <i>"dzə</i>	- <i>"dʒə</i> <i>ndʒa-/ndʒə-</i>
1PL	<i>jə-</i>	- <i>jə</i>	- <i>jə</i> <i>ja-/jə-</i>
2/3PL	<i>nə-</i>	<i>nə-</i>	<i>nə-</i>

transitive and 2SG object)⁴¹ and a third person object suffix, (ii) the 1SG suffix presents unique correspondences, and has many allomorphs in Zbu and Situ, (iii) Zbu has a 1PL possessive prefix that is unrelated to the 1PL suffix, (iv) Situ has no distinction between 1DU and 2/3DU possessive prefixes, and (v) the 1DU, 2/3DU and 2/3PL affixes are either (alveolo)-palatal or dental across the languages.

As shown by Table 14.21, Tshobdun and Tatshi Japhug only have dental person indices, Zbu and Situ only (alveolo-)palatal ones, and Kamnyu Japhug is intermediate between the two groups, with alveolo-palatal dual affixes -*tci*/-*ndzi*

⁴¹In Situ, the second person singular is indexed by both a prefix and a suffix, while in the other languages including Japhug, it is only indexed by the prefix (§14.2.1.2).

15282 and dental plural affixes *-nu*. It is noteworthy that Kamnyu Japhug, the dialect
 15283 geographically closest to Tshobdun, is less similar to that language in this regard
 15284 than the Tatshi dialect, which is not in direct contact with Tshobdun.

Table 14.21: (Alveolo-)palatal vs. dental person indices in Gyalrong languages

	Tshobdun	Tatshi Japhug	Kamnyu Japhug	Zbu	Situ
1DU	<i>-tsə</i>	<i>-tsə</i>	<i>-tɕi</i>	<i>-tɕə</i>	<i>-tʃ^h</i>
2/3DU	<i>-"dza</i>	<i>-ndza</i>	<i>-ndzi</i>	<i>-"dʒə</i>	<i>-ntʃ^h</i>
3PL	<i>-nə</i>	<i>-nə</i>	<i>-nu</i>	<i>-ŋə</i>	<i>-ŋ</i>

15285 A possible explanation to account for the resemblances between the suffixes,
 15286 the possessive prefixes and the pronouns is to argue that the former were gram-
 15287 maticalized from the latter, as has been proposed by LaPolla (1992). In the same
 15288 line of reasoning, the second and third person dual and plural suffixes, which are
 15289 similar to the dual and plural nominal markers in Situ and Tatshi Japhug, could
 15290 be argued to have originated from them. In Tatshi Japhug for instance, the dual
 15291 *-ndza* and plural *-nə* suffixes could be analyzed as deriving from the dual *ndza* and
 15292 plural *nəjə* nominal clitics (which differ from those of Kamnyu Japhug, §9.1.1).

15293 The idea of transparent grammaticalization from pronouns or number markers
 15294 in indexation suffixes is however not as straightforward as it might appear at first
 15295 glance. Leaving aside extra-Gyalrong comparative evidence (Jacques 2012a; De-
 15296 Lancey 2014), and the fact that most of the pronouns in Gyalrong languages are
 15297 derived from possessive prefixes rather than the opposite (Jacques 2016e, §6.1), if
 15298 the similarity between the three series of person markers were to be explained as
 15299 resulting exclusively from a recent grammaticalization, the pattern in Table 14.20,
 15300 where the place of articulation (alveolo-palatal vs. dental) of dual and plural in-
 15301 dexation suffixes is aligned on that of the pronouns and possessive prefixes and
 15302 draws an isogloss across the dialects of Japhug (Table 14.21), would imply that
 15303 the grammaticalization postdated not only the breakup of proto-Gyalrong, but
 15304 even that of the common ancestor of modern Japhug dialects.

15305 The indexation system of Gyalrong languages cannot however be that recent,
 15306 in particular because the stem alternation system, which contributes to person
 15307 indexation (§12.2.2.2, §14.3.2.1) is clearly reconstructible to the common ancestor
 15308 of Gyalrong languages and Tangut (Gong 2016b) and is too complex and irregular
 15309 (in particular in Zbu, see Sun 2004 and Gong 2018) to be a recent development.

15310 Three alternative types of explanation can be explored to account for the corre-
 15311 spondences between affixes and pronouns: analogical simplification of allomor-
 15312 phy, contamination and degrammaticalization.

15313 First, it is possible that proto-Gyalrong had phonetically conditioned allomorphs
 15314 of the suffixes (the 1SG suffix has maintained some allomorphy in Zbu and Situ,
 15315 see Gong 2014: 46 and Lin 1993: 198), and that the attested languages have gen-
 15316 eralized one of the allomorphs. Analogical levelling has certainly taken place in
 15317 the case of the 1SG. Note that the form *-aŋ* in Tshobdun cannot derive from proto-
 15318 Gyalrong *-aŋ (which yields Tshobdun -i), and the Zbu and Situ -ŋ cannot be a
 15319 phonetic reflex of *-ŋ in most cases, otherwise for instance stems in -a should
 15320 alternate with -o ← *-aŋ in Situ in the 1SG. In Situ and Zbu, the final -ŋ in open
 15321 syllables must have been restored, due to analogical spread from a particular
 15322 context where the *-ŋ was maintained.

15323 Second, the similarity between possessive prefixes, indexation suffixes and
 15324 pronouns could be the result of mutual contamination and convergence. Cases
 15325 of contamination between indexation systems and possessive affixes are attested.
 15326 In Hebrew and Phoenician, for instance, the first person singular perfect suffix
 15327 -t̄i has an unexpected vocalism, as it is commonly agreed that proto-North-West
 15328 Semitic suffix was *-tu, whose outcome should have been †-t. The irregular He-
 15329 brew form is explained as due to contamination from either the 1SG pronoun ?ənī
 15330 or the 1SG possessive suffix -i (Joüon & Muraoka 2006: 122-123; 132-133, Suchard
 15331 2016: 227–229).

15332 Contamination could account for the 1SG affixes in Japhug. The possessive
 15333 prefix *a-* is the regular outcome of earlier *ŋa-, a proto-form which also account
 15334 for the 1SG prefixes in the other languages. The 1SG suffix -a however does not
 15335 regularly correspond to the suffixes -aŋ and -ŋ found in Tshobdun, Zbu and Situ.
 15336 One possibility is that *-ŋp was one of the proto-Gyalrong allomorphs of the 1SG
 15337 suffix,⁴² and was generalized. Another explanation is that only *-ŋ was present in
 15338 proto-Gyalrong, and that the *-ŋp precursor of Japhug -a arose by contamination
 15339 of *-ŋ with the (historically related) possessive prefix *ŋp-.

15340 Third, the possibility of degrammaticalization from person indexation suffixes
 15341 to nominal number markers in Tatshi Japhug and Situ should be taken into con-
 15342 sideration. Kamnyu Japhug, Tshobdun and Zbu have dual and plural markers that
 15343 are completely different from indexation suffixes (Kamnyu *ni / ra*, Tshobdun *ni?*
 15344 / *rp?* and Zbu *ni / ré?*, see §9.1.1, Sun 1998 and Gong 2018). The plural marker is cog-
 15345 nate to Pumi =*ra* (Daudey 2014: 135): Japhug -a regularly corresponds to Pumi

⁴²In Bantawa for instance, the 1SG suffix has three allomorphs -ŋ, -ŋ, and -ŋa (Doornenbal 2009: 155).

15346 -ə in the native vocabulary (Jacques 2017c), and it is therefore unlikely to be a
 15347 Northern Gyalrong innovation.

15348 If the Zbu, Tshobdun and Kamnyu Japhug number markers above are con-
 15349 servative, the corresponding Tatshi Japhug *ndzə* / *njo* and Cogtse Situ *ndze* / *ne*
 15350 forms must therefore be innovations, and by consequence, it cannot be argued
 15351 that the 2/3 indexation suffixes derive from these number markers. The opposite
 15352 scenario is possible: Norde (2009: 204–206) discusses the case of the Irish 1PL pro-
 15353 noun *muid* which comes from one of the allomorphs of the 1PL future indexation
 15354 suffix. A similar type of debonding can account at least for the Tatshi Japhug dual
 15355 *ndzə* nominal marker, from the 2/3 dual -*ndzə* indexation suffix.⁴³ The acquisition
 15356 of indexation suffixes by several non-verbal words discussed in §14.7 may have
 15357 contributed to the reanalysis of indexation suffixes as number-marking enclitics.

15358 Much remains unclear about the history of person indexation suffixes and
 15359 the nature of their relationship with pronouns, possessive prefixes and number
 15360 markers in Gyalrong languages. A more satisfying account of these data will only
 15361 become possible when a fully explicit system of proto-Gyalrong reconstruction,
 15362 and complete data on as many varieties as possible becomes available.

15363 14.8.2 The inverse prefix

15364 Two Gyalrong-internal scenarios could be proposed to account for the origin of
 15365 the inverse prefix.

15366 First, it could be proposed that the inverse comes from the 3SG possessive pre-
 15367 fix. In Tshobdun, Zbu and Situ, the inverse prefix (*o-*, *və-* and *wə-*, respectively) is
 15368 homophonous with the 3SG possessive prefix (see Table 5.2 in §5.1.1.5). This is not
 15369 the case in Japhug, where the inverse *yuu-* / *-wy* is clearly different from the 3SG *w-*,
 15370 but it is possible that the 3SG possessive underwent an irregular development, as
 15371 argued in §5.1.1.5. The 3' → 3SG form would originally be a non-finite form taking
 15372 a possessive prefix (for instance a predecessor of the bare infinitive, §16.2.2), and
 15373 the inverse prefix would have spread from the 3' → 3 to the mixed scenarios 3 → 2
 15374 and 3 → 1, following the pathways described in Jacques & Antonov 2018.

15375 Second, the partial resemblance between the Japhug allomorph *yuu-* and the
 15376 associated motion cislocative *yuu-* prefix (§15.2.1.1) could support the idea that the
 15377 inverse derives from the cislocative, following a well-known grammaticalization
 15378 pathway (Jacques & Antonov 2014). This hypothesis is however less likely, as the
 15379 cislocative itself may be an innovation in Gyalrong languages (§15.2.1).

⁴³The case of plural *njo* is more complicated: the *nə-* element here probably rather derives from the distal demonstrative.

15380 In any case, cognates of the inverse prefix are found in other Gyalrongic lan-
 15381 guages (Lai 2015) and in Kiranti (Jacques 2012a), so that whatever the ultimate
 15382 origin of this prefix, it was already grammaticalized at the proto-Gyalrongic level.

15383 14.8.3 The origin of portmanteau prefixes

15384 The presence of portmanteau prefixes in the local 1→2 and 2→1 configurations in
 15385 Japhug is not unusual crosslinguistically (Heath 1998). However, the resemblance
 15386 of the 1→2 prefix *ta-* to the second person *tu-* prefix on the one hand, and of the
 15387 2→1 prefix *kua-* to various non-finite velar prefixes (§16.8.1) on the other hand,
 15388 raises the question of their potential historical relatedness.

15389 The form of the local configuration prefixes is very similar in other Gyalrong
 15390 languages, as shown by Table 14.22 (data from Lin 1993: 218, Sun & Shidanluo
 15391 2002 and Gong 2014).

Table 14.22: Local scenario prefixes in Gyalrong languages

	1→2	2→1
Japhug	<i>ta-</i>	<i>kua-</i>
Tshobdun	<i>ta-</i>	<i>kə-o-, tə-o-</i>
Zbu	<i>ta-</i>	<i>kə-w-, tə-w-</i>
Situ	<i>ta-</i>	<i>kə-w-</i>

15392 Only two differences are found in the local domain across the Gyalrong lan-
 15393 guages: Japhug does not have the inverse *wy-* prefix in the 2→1 form, and Zbu
 15394 and Tshobdun allow an alternative form with the second person prefix *tə-* and the
 15395 inverse prefix. In all four languages, the verb takes suffixes that are coreferent
 15396 with the object (second person in 1→2 and first person in 2→1). Situ is the only
 15397 language with a suffix *-n* in the 1→2SG form, the same as that found in intransitive
 15398 2SG and 3→2SG.

15399 Jacques (2018c: 420–421) proposes that the 1→2 prefix originates from the fu-
 15400 sion of the second person prefix *tu-* with the agentless passive *a-* (from **ŋa-*,
 15401 Jacques & Chen 2007), which yields the expected form in all four languages. In
 15402 this view, a form like Japhug *ta-mbi* 1→2-chase-SG ‘I will give it to you_{SG}’ would
 15403 have developed through the following stages:

- 15404 • **tə-ŋa-mbi-nə* 2-PASS-give-2SG ‘it will be given to you’ (Passive form)

- **ta-mbi-na* 2:PASS-give-2SG (Regular phonological fusion between the person marker and the passive prefix, attested in all four Gyalrong languages, §12.3)
- **ta-mbi-na* 1→2-give-2SG ‘I will give it to you’ (reanalysis of the fused form as a portmanteau prefix; the unspecified agent of the passive construction is construed as being first person)
- *ta-mbi* 1→2-give ‘I will give it to you’ (loss of 2SG suffix in Japhug)

This scenario is not completely straightforward; in particular, the passive derivation *ambi* ‘be given’ of the verb *mbi* ‘give’ takes the theme, not the recipient, as intransitive subject (§18.1.4), and passives in Japhug are only rarely attested with first or second person subjects (§18.1). However, there are no major phonological or morphological obstacles against this hypothesized scenario, and good typological parallels have been described (DeLancey 2018).

In the case of 2→1 *kui-*, Jacques (2012a) originally proposed that this prefix might be an archaism of Gyalrong languages, based on the principle of archaic heterogeneity (Hetzron 1976), using the data in Table 14.23. In second person forms other than 1→2, some Kiranti languages have a dental stop prefix (Bantawa *ti-*, Doornenbal 2009), and Limbu has the velar prefix *ke-* (Michailovsky 2002), correspondance to Japhug *tui-* in intransitive second person and 2→3, and *kui-* in 2→1 configurations. A possible way of interpreting this corresponding would be to suppose that a pattern similar to that found in Gyalrongic (with a velar prefix in 2→1 and a dental stop prefix in other second person forms) has to be reconstructed in proto-Kiranti: Bantawa would have generalized the *ti-* prefix to the 2→1 slot (a type of analogical levelling attested in Zbu and Tshobdun, see Table 14.22), and Limbu the velar prefix to the 2→3 and intransitive forms.

Table 14.23: Comparison of second person forms in Japhug and selected Kiranti languages

	Japhug	Bantawa	Limbu
2.INTR	<i>tui-</i> Σ	<i>ti-</i> Σ	<i>ke-</i> Σ
2→3	<i>tui-</i> Σ	<i>ti-</i> Σ-u	<i>ke-</i> Σ-u
2→1	<i>kui-</i> Σ-a	<i>ti-</i> Σ-aŋ	<i>ke-</i> Σ-aŋ
1→2	<i>ta-</i> Σ	Σ-na	Σ-ne

This hypothesis raises three issues: (i) the 2→1 form is less common than second intransitive and 2→3, and is unlikely to have served as the basis for analogical levelling in Limbu, (ii) the presence of an inverse prefix in the 2→1 form in other Gyalrong languages is unexplained and (iii) the homophonies between the second person possessive prefix *ke-* and the indexation prefix in Limbu on the one hand, and the *kua-* 2→1 portmanteau prefix and the non-finite *kua-* prefixes on the other hand, would be due to chance.

Since the *ke-* second person indexation prefix in Limbu can be explained as an internal innovation (Jacques 2012a: 94), it is necessary to explore the possibility that Japhug the 2→1 *kua-* portmanteau is also an Gyalrong innovation, especially since no other traces of such a putative prefix are found elsewhere in the Trans-Himalayan family.

As mentioned above, Japhug 2→1 *kua-* differs from the 2→1 portmanteau prefixes found in the three other Gyalrong languages, which co-occur with the inverse prefix (Table 14.22). An identical difference appears in the generic object form, which takes of a simple *kua-* prefix in Japhug (§14.3.2.5) but has an additional inverse prefix *kə-o-* in Tshobdun (Table 14.24, Sun 2014b).

Table 14.24: Comparison of generic person prefix in Japhug and Tshobdun

	Japhug	Tshobdun
GENR.S	<i>kua-</i>	<i>kə-/kp-</i>
GENR.A	<i>wy-</i>	<i>kə-/kp-</i>
GENR.P	<i>kua-</i>	<i>kə-o-</i>
2→1	<i>kua-</i>	<i>kə-o-</i>

The resemblance between the 2→1 portmanteau prefix, the generic person prefixes, and the nominalization prefixes in Japhug and Tshobdun is striking. However, since in these two languages velar participles (§16.1.1, §16.1.2) and infinitives (§16.2.1) are compatible with neither first person indexation suffixes nor the inverse prefix, it is not possible to propose a direct path of reanalysis from participial or infinitive forms to 2→1 (which co-occur with first person suffixes, §14.3.2.3) or generic (which appear with inverse in Tshobdun) prefixes.

However, in Situ, unlike other Gyalrong languages, semi-finite nominalized forms combining a prefix *kə-* and person indexation suffixes (187) and/or inverse marking (188, in 3→1SG configuration) are also attested, in particular to build certain types of relative clauses (Sun & Lin 2007).

- 15458 (187) [ŋa kə-fi-ŋ]=tə tep̪e tsəs-ŋ
1SG SBJ:PCP-know[I]-1SG=TOP DEM:PL say[I]-1SG
15459 ‘I will say what I know about.’ (Cogtse dialect, Lin 2016: 72)

15460 (188) [sanam-scət kə no-kə-o-mbə-ŋ] tə,
Bsod.nams-Skyid ERG AOR.INV-NMLZ-INV-give-1SG DET
15461 <zengguangxianwen> u-tʰiē 'nə-ŋəs
name 3SG.POSS-book SENS-be[I]
15462 ‘What Bsod nams Skyid gave me is the book ‘Zengguan xianwen.’
15463 (Bragbar dialect, Zhang 2020)

If one accepts the hypothesis that semi-nominalized verb forms did already exist in proto-Gyalrong, and could be used to mark *indefinite* core arguments in addition to the functions they have in modern Situ, it becomes possible to account for the forms in Tables 14.22 and 14.24.

A nominalized form combining the prefix *kə-*, the inverse and a first person suffix like *no-kə-o-*mbâ*-*ŋ** in example (188), originally meaning ‘someone gave it to me’, could have become a less abrupt way of saying ‘you gave it to me’ and have been progressively reanalyzed as a 2→1 prefix (Jacques 2018c; DeLancey 2018). The absence of inverse in Japhug in the 2→1 form may be explained by supposing that in the ancestor of Japhug, semi-finite forms became incompatible with inverse marking, while still taking indexation suffixes. This idea is not outlandish, as semi-finite inverse forms are very rare in Situ (only one example is found in Lin’s 2016 text corpus).

The velar nominalization prefixes in semi-finite indefinite forms could also have become reanalyzed as generic person prefixes. This hypothesis implies that Tshobdun is more conservative than Japhug, and that Japhug has later innovated by replacing generic transitive subjects by inverse forms, perhaps to avoid confusion between generic subjects and object caused by the constraint against inverse in semi-finite forms already posited above to explain the 2→1 portmanteau *kua-*. The idea that the Japhug pattern is innovative is supported by the existence of irregular verbs whose generic transitive subjects are marked by *kua-* prefix rather than the inverse (§14.3.4); these verbs would be the remnants of the stage attested in Tshobdun.

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15 Orientation and associated motion

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15.1 Orientation preverbs

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In Japhug, orientation preverbs have main fundamental functions. First, they are a fundamental element of the TAME system; all finite verb forms, except the Factual Non-Past (§21.3.1) and the Apprehensive (§21.7.1), require one (and only one) orientation preverb. Nearly all verbs (§15.1.1.5) have at least one lexically determined orientation, used to build preverb-requiring tenses. Second, preverbs can in some cases also serve to indicate the spatial direction or orientation of a motion event or an action expressed by the verb form.

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This section first presents the morphological features of orientation preverbs and their historical relationship with other words expressing orientation, and then discusses the expression of spatial direction with motion verbs, some common extended uses of the preverbs, and lexicalized orientations.

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15.1.1 Morphology

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The morphology of orientation preverbs presents significant differences across Japhug dialects. This section first describes the system of preverbs in Kamnyu Japhug, in particular with contracting verbs (§12.3), presents comparative data from Eastern dialects, and then discusses the historical relationship of preverbs with the corresponding locative nouns and adverbs.

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15.1.1.1 The orientation preverbs in Kamnyu

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This section deals with the form of orientation preverbs in the Kamnyu dialect in non-contracting verbs. In the Kamnyu dialect, four series of preverbs can be distinguished, as in Table 15.1. The choice of a particular series depends on TAME and person indexation; capital letters are used as labels, because functional labels (such as ‘perfective’ or ‘imperfective’) would be potentially misleading, since series B preverbs in particular occur in functionally unrelated verb forms. Series C and D historically result from the merger of vowel-initial prefixes with A and B preverbs, respectively (§15.1.1.3).

15 Orientation and associated motion

15515 Only A and B-type preverbs are found in non-finite verb forms.

15516 Preverbs occur in slot -3 of the verbal template (§11.2), following Associated
 15517 Motion prefixes (§15.2.1), but preceding inverse and indexation prefixes (§14.2.1.2,
 15518 §14.3.2.3, §14.3.2.7).

15519 The four series of preverbs each comprise seven orientations, which can be
 15520 divided into four subsets (including three spatial dimensions, §15.1.3): vertical (up
 15521 / down), riverine (upstream / downstream), solar (east /west) and the unspecified
 15522 orientation.¹

Table 15.1: Orientation preverbs in Kamnyu Japhug

Orientation	A	B	C	D
Upwards	<i>tx-</i>	<i>tu-</i>	<i>ta-</i>	<i>to-</i>
Downwards	<i>puu-</i>	<i>pjuu-</i>	<i>pa-</i>	<i>pjx- / pjo-</i>
Upstream	<i>ly-</i>	<i>lu-</i>	<i>la-</i>	<i>lo-</i>
Downstream	<i>t^huu-</i>	<i>c^huu-</i>	<i>t^ha-</i>	<i>c^hx- / c^ho-</i>
Eastwards	<i>kx-</i>	<i>ku-</i>	<i>ka-</i>	<i>ko-</i>
Westwards	<i>nuu-</i>	<i>jnuu-</i>	<i>na-</i>	<i>jnx- / no-</i>
Unspecified	<i>jx-</i>	<i>ju-</i>	<i>ja-</i>	<i>jo-</i>

15523 Each of the three spatial dimensions are encoded by a pair of preverbs: upper
 15524 (upwards, upstream, east) vs. lower (downwards, downstream, west) orientations.
 15525 In addition to formal differences between upper and lower orientation preverbs,
 15526 this contrast reflects the fact that each of the three dimensions has an intrinsic di-
 15527 rectionality, encoding the direction of gravity, the flow of water and the apparent
 15528 trajectory of the sun in the sky, respectively. The lower orientations correspond
 15529 to the direction of natural motion along these dimensions: downwards (drawn by
 15530 gravity), downstream (drawn by water flow) and westwards (towards the point
 15531 where the sun sets). The upper orientations encode the opposite directions, re-
 15532 flecting the source from which natural motion takes place.

15533 The A-type preverbs have either /x/ or /u/ vocalism, corresponding to upper
 15534 and lower orientations, respectively. They occur in the Aorist (§21.5.1.1, except for
 15535 the 3SG→3' configurations (where the C series is used instead, §14.3.2.2), the Im-
 15536 perative (§21.4.2.1) and the Irrealis (§21.4.1.1). In addition, the Past Imperfective

¹Only orientable verbs (including motion and manipulation verbs, §15.1.2) are compatible with the unspecified orientation preverbs.

pui- corresponds to the DOWNWARDS A-type preverb (§21.5.3.1, Lin 2011). With subject and object participles, A-type preverbs are used to build perfective participles (§16.1.1.2, §16.1.2.2); they do not occur on oblique participles (§16.1.3.4) or infinitives (§16.2.1.2).

The B-type preverbs have /u/ vocalism in upper orientations, and /w/ in lower orientations. In addition, lower orientations preverbs have a palatalized form. This palatalization is either reflected by the addition of a -j- medial in the case of *pjuu-* DOWNWARDS or by a shift of from dental (in the A-type preverb) to the corresponding palatal for *c^huu-* DOWNSTREAM and *jnu-* EASTWARDS.² The vowel transcribed *w* is mostly realized as [i] in this context (§3.5.2). The B series occurs in the Imperfective (§21.2.1) and in the Immediate Perfective Converb (§16.6.3). In addition, the *jnu-* prefix marking the Sensory evidential (§21.3.2.1) and the *ku-* prefix of the Egophoric Present (§21.3.3.1) and the Dubitative (§21.4.4) are specialized uses of the WESTWARDS and EASTWARDS B-type preverbs. B-type preverbs are found with subject, object and oblique participles (§16.1.1.2, §16.1.2.2, §16.1.3.4) as well as velar infinitives (§16.2.1.2, §16.2.1.6).

The C-type preverbs have the same onset as the corresponding A-type preverbs, but their vocalism is neutralized to /a/. This series only occurs in the Aorist 3SG→3' configuration of the transitive paradigm (§14.3.2.2).

The D-type preverbs are exclusively used to build the Inferential (Perfective §21.5.2.1 and Imperfective §21.5.3.1). These preverbs have the same onsets as those of the B series, with a division between non-palatalized UPWARDS preverbs and palatalized DOWNWARDS preverbs. The preverbs of the UPWARDS series have /o/ vocalism, but those of the ‘downward’ series have two variants, with either /o/ or /y/ vocalism in free variation, as illustrated by the 3SG Inferential *jny-me* and *jno-me* of the verb *me* ‘not exist’ in (1) and (2), respectively.

- (1) *tce mts^hu nua jny-me tce,*
 LNK lake DEM IFR-not.exist LNK
 ‘Then the lake disappeared.’ (2003nyima-2, 106)
- (2) *wi-ftso^b nua no-me, no-nua-y^b-me*
 3SG.POSS-female.hybrid.yak DEM IFR-not.exist IFR-AUTO-CAUS-not.exist
 q^be
 LNK
 ‘Her female hybrid yak was gone, she lost it.’ (gesar 2003, 35)

²In the synchrony of Japhug, clusters involving a dental stop followed by /j/ are attested, though only in ideophones (§4.2.2.2). The alternation between /t^b/ and /c^b/ is unique in the grammar of Japhug.

15568 Since the contrast between /v/ and /o/ is neutralized before the inverse -wy-
 15569 prefix (§14.3.2.7), A- and D-type UPWARDS preverbs have the same surface form
 15570 when they directly precede it, as shown in Table 15.2. The contrast is however
 15571 maintained in the transcription system used in this grammar.

15572 With DOWNWARDS preverbs the contrast is not lost in this context, since both
 15573 vowels and consonants remain different (for instance *pú-wy-* vs. *pjv-wy-*).

Table 15.2: Neutralization of the contrast between A and D-type pre-
 verbs when followed by the inverse prefix

Orientation	Perfective 3' → 3SG	Inferential 3' → 3SG	Surface form
Up	<i>tv-wy-</i>	<i>tó-wy-</i>	[tó(y)]
Upstream	<i>lv-wy-</i>	<i>ló-wy-</i>	[ló(y)]
Eastwards	<i>kv-wy-</i>	<i>kó-wy-</i>	[kó(y)]
Unspecified	<i>jv-wy-</i>	<i>jó-wy-</i>	[jó(y)]

15574 In all four series, the unspecified orientation preverbs behave like the upper
 15575 orientation preverbs (/v/, /u/ and /o/ vocalism in series A, B and D, respectively).

15576 The isolated preverb *k^hu-*, which cannot be included in the system described
 15577 above is found in the archaic form *k^hu-ti* ‘s/he said’ of the verb *ti* ‘say’ (§21.5.4).

15.1.1.2 Preverbs and vowel contraction

15579 Vowel contraction occurs when a type A or B preverb (in tenses forms such as the
 15580 *p^u-* Past Imperfective §21.5.3.1, the *j^{nu}-* Sensory §21.3.2.1 and the *ku-* Egophoric
 15581 Present §21.3.3.1 which require the same preverb for all verbs) directly precedes
 15582 either the stem of a contracting verb (§12.3) or the progressive prefix *asu-*. Vowel
 15583 contraction occurs in an idiosyncratic way depending on the type of preverb. The
 15584 *a-* of contracting verb or of the progressive prefix merges with A-type preverbs
 15585 as [-a-] in the Aorist, and as [-v-] in the Irrealis and Imperative. With B-type
 15586 preverbs the result of the contraction depends on the preceding vowel: [-o-] with
 15587 upper *Cu-* preverbs, and [-v-] with lower *C(j)u-* preverbs. Table 15.3 summarizes
 15588 the resulting forms (not including Irrealis or Imperative); the spelling adopted in
 15589 this grammar uses the intermediate ‘contracting form’.

15590 The surface forms resulting from vowel contraction of A- and B-type preverbs
 15591 are identical to C-type and D-type preverbs, respectively. The only immediate
 15592 difference between D-type preverbs and contracting B-type preverbs is that the
 15593 former show free variation between *Cv-* and *Co-* in the DOWNWARDS series, while

15594 the latter only have the C_y- form. For instance, while the Inferential of *me* ‘not
 15595 exist’ is either *jnr-me* or *no-me* (see 1 and 2 above) with the two variants of the D-
 15596 type preverbs, the result of the fusion of the B-type preverb *jnu-* (either Sensory
 15597 or Imperfective) with either a contracting *a*- initial verb or a progressive *asu-*
 15598 prefix is *jnu-y-* [jnr-] and cannot be realized as [no-] except in the case of inverse
 15599 -*wy-* infixation within the progressive *y-<wy>sui/z-* (§14.3.2.7, §21.6.1.1).

Table 15.3: Vowel contraction with A- and B-type orientation preverbs

Orientation	Preverb	Contracting form	Surface form
Up (A)	<i>t_y-</i>	<i>t_y-a-</i>	[ta-]
Down (A)	<i>p_{uu}-</i>	<i>p_{uu}-a-</i>	[pa-]
Upstream (A)	<i>l_y-</i>	<i>l_y-a-</i>	[la-]
Downstream (A)	<i>t^hu_u-</i>	<i>t^hu_u-a-</i>	[t ^h a-]
Eastwards (A)	<i>k_y-</i>	<i>k_y-a-</i>	[ka-]
Westwards (A)	<i>n_{uu}-</i>	<i>n_{uu}-a-</i>	[na-]
Unspecified (A)	<i>j_y-</i>	<i>j_y-a-</i>	[ja-]
Up (B)	<i>tu-</i>	<i>tu-o-</i>	[to-]
Down (B)	<i>p_{juu}-</i>	<i>p_{juu}-y-</i>	[pjy-]
Upstream (B)	<i>lu-</i>	<i>lu-o-</i>	[lo-]
Downstream (B)	<i>c^hu_u-</i>	<i>c^hu_u-y-</i>	[ch ^h y-]
Eastwards (B)	<i>ku-</i>	<i>ku-o-</i>	[ko-]
Westwards (B)	<i>jnu-</i>	<i>jnu-y-</i>	[jny-]
Unspecified (B)	<i>ju-</i>	<i>ju-o-</i>	[jo-]

15600 C-type preverbs never appear in contracting contexts, because on the one hand
 15601 contracting verbs are all intransitive and thus do not take C-type preverbs in the
 15602 Aorist (§14.3.1), and on the other hand the progressive *asu-* removes all marks
 15603 of morphological transitivity, including the alternation between A- and C-type
 15604 preverbs (§14.3.1, §21.5.1.1).

15605 Confusion between C-type preverbs and A-type preverbs with vowel fusion
 15606 can arise in two cases with transitive verbs selecting the DOWNWARDS orientation.
 15607 First, the 3→3' Aorist form (for instance *pa-rku* ‘he put it into it’) can have the
 15608 same surface form (in this case [parku]) as the Past Imperfective of the Passive
 15609 (§21.5.3.1, §18.1.1) of the same verb (*pui-a-rku* ‘it was put in it’). Second, the 3→3'
 15610 Aorist Causative (*pa-sui-rvt* ‘he wrote it with it, he used it to write it’) can be
 15611 homophonous (here [pasurvt]) with the Past Imperfective Progressive (*pui-asu-*
 15612 *rvt* ‘he was writing it’).

Unlike C-type preverbs, D-type preverbs often occur with contracting verbs or with the progressive prefix. In such cases, the result of vowel contraction is not distinguishable from that with a B-type preverb. For instance, in (3) the Inferential Imperfective *pjy-r-y<nu>yro-nu* of the verb *anuyro* ‘play’ has the same surface form [pjyñwyrónu] as the corresponding Imperfective *pju-r-y<nu>yro-nu*. It is clear from context however that the form here must be interpreted as Inferential Imperfective, because the other verbs in the same passage *pjy-nui-ry-rnt-nu* and *pjy-scit-nu* are in this form, not in the simple Imperfective.

- (3) *uu-pi* *ra uu-jmjo* *uu-ŋgw* *nuitcu*,
 3SG.POSS-elder.sibling PL 3SG.POSS-dream 3SG.POSS-inside DEM:LOC
pjy-nui-ry-rnt-nu, *pjy-r-y<nu>yro-nu* *q^he*, *wuma zo*
 IFR.IPFV-AUTO-APASS-write-PL IFR.IPFV-<AUTO>play-PL LNK really EMPH
pjy-scit-nu *pju-ŋu*
 IFR.IPFV-be.happy-PL SENS-be
 ‘In her dream, her elder brothers were drawing, were playing, were very
 happy.’ (140520 ye tiane-zh, 84)

In the Kamnyu dialect of Japhug, however, although vowel contractions involving D-type preverbs are attested, such ambiguous forms are rare and avoided. More commonly, a peg circumfix *kuu-...-ci* occurs in these forms: the *kuu-* element prevents fusion between the D-type prefix and the following vowel, which is realized *-r-* in this context.

For instance, instead of *pjy-r-y<nu>yro-nu*, the more common Imperfective Inferential form of *anuyro* ‘play’ is *pjy-k-r-y<nu>yro-nu-ci* as in (4). The *-ci* suffix is originally an evidential marker (cognate to the Tshobdun =*cə* Mediative suffix, on which see Sun 2017: 564), but in Kamnyu Japhug it only occurs in combination with the *kuu-* prefix as a peg element (§11.4).

- (4) *tce nuura pjy-k-r-y<nu>yro-nu-ci* *tce*
 LNK DEM:PL IFR.IPFV-PEG-<AUTO>play-PL-PEG LNK
 ‘They were playing.’ (140510 fengwang-zh, 33)

Inferential forms with the peg circumfix *kuu-...-ci* regularly occur with contracting verbs or verbs bearing the progressive prefix in the same contexts as the corresponding non-contracting forms without the peg. For instance, in (5), the verb *pjy-k-rygi-ci* ‘it was green’ with the peg circumfix clearly belongs to the same TAME category as the two preceding verbs *pjy-tu* ‘there was’ and *pjy-rom* ‘it was dry’.

- 15644 (5) *t̪su w̪-rk̪w̪ zuu si tuu-p̪uu pj̪-tu, si tuu-p̪uu nuu*
 path 3SG.POSS-side LOC tree one-tree IFR.IPFV-exist tree one-tree DEM
w̪-p̪aʌ w̪-ntsi nuu pj̪-rom zo,
 3SG.POSS-half 3SG.POSS-one.of.a.pair DEM IFR.IPFV-be.dry EMPH
w̪-p̪aʌ w̪-ntsi nuu pj̪-k-yrŋi-ci
 3SG.POSS-half 3SG.POSS-one.of.a.pair DEM IFR.IPFV-PEG-be.green-PEG
zo,
 EMPH
- 15648 ‘On the side of the road, there was a tree, one half of that tree was dry
 15649 and the other half was green. (The divination2002, 11-12)

15650 In the Inferential, the peg circumfix becomes a morphological exponent of the
 15651 Passive in addition to the Passive prefix *v-* itself: without the peg, the passive
 15652 would not be easily differentiable from the base transitive verb. For instance,
 15653 without the peg element, the Inferential Imperfective Passive *pj̪-k-v-ta-ci* ‘It had
 15654 been put there’ in (6) would be identical to the Inferential *pj̪-ta* ‘he put it there’
 15655 with the DOWNWARDS orientation.

- 15656 (6) *tcoχtsi w̪-taʌ n̪uitcu, nykinuu, qajyi kuβde, cʰa kuβde-phoŋ*
 15657 table 3SG.POSS-on DEM:LOC FILLER bread four alcohol four-bottle
pj̪-k-v-ta-ci.
 IFR.IPFV-PEG-PASS-put-PEG
 15658 ‘On the table, there were four pieces of bread and four bottles of alcohol.’
 15659 (140510 sanpian sheye-zh, 51)

15660 The peg circumfix appears in first person forms, following the indexation suf-
 15661 fix (as in 7), but never in second person forms, as the *tuu-* prefix (§14.2.1.2) occurs
 15662 between the preverb and the following contracting vowel (8).

- 15663 (7) *azo, [...] tuurme yuu w̪-vjoŋ jny-k-vβzu-a-ci*
 15664 1SG person GEN 3SG.POSS-servant IFR-PEG-become-1SG-PEG
 ‘I have become man’s slave!’ 2014 ma he lu-zh, 29)
- 15665 (8) *n̪yzo pya jny-tui-vβzu cti tce*
 15666 2SG bird IFR-2-become be.AFF:FACT LNK
 ‘You have become a bird!’ (160630 abao-zh, 151)

15667 The -ci suffixal element can be elided, though not in utterance-final position
 15668 (§11.4.2).

15669 15.1.1.3 Preverbs in eastern Japhug dialects

15670 The Kamnyu dialect of Japhug stands apart from most varieties in terms of its
 15671 system of preverbs in two regards: the status of C- and D-type preverbs and the
 15672 form of the DOWNWARDS orientation preverbs.

15673 The Xtokavian (§6.5.1) dialects of Japhug spoken in Sarndzu and Tatshi are
 15674 better analyzed with only two series of preverbs: the A- and B-types (Lin 2011:
 15675 70, with a different terminology). Instead of the C- and D-type preverbs, Lin &
 15676 Luoerwu (2003) and Lin (2011) posit two additional vowel-contracting *a*- prefixes
 15677 in these dialects, one occurring in the 3→3' Aorist configuration, and the other
 15678 one in the Inferential.

15679 These prefixes occur with the A- and B-type preverbs, respectively. In third
 15680 and first person forms, the surface forms (resulting from the fusion of these pre-
 15681 verbs with the *a*- 3→3' Aorist or Inferential) are identical (minor pronunciation
 15682 differences excepted) to the corresponding C-type and D-type preverbs in Kam-
 15683 nyu Japhug, following fusion rules similar to those presented in Table 15.3

15684 For instance, in (9a) and (9b), the verb forms transcribed as *nə-a-fe* (in Tatshi)
 15685 and *nŋ-ce* (in Kamnyu) are near-identical in surface pronunciation and function.

- 15686 (9) a. *lamu nə-a-fe*

ANTHR IFR:WEST-IFR-go

15687 ‘Lhamu went westwards.’ (Tatshi dialect, Lin 2011: 70)

- 15688 b. *tamu nŋ-ce*

ANTHR IFR:WEST-go

15689 ‘Lhamu went westwards.’ (Kamnyu dialect)

15690 In second person forms, on the other hand, the second person prefix in Tatshi is
 15691 inserted between the B-type preverb and the *a*- Inferential prefix (A-type preverb
 15692 and *a*- 3→3' prefix, respectively), as can be seen by comparing the Inferential
 15693 second person intransitive in Tatshi (10a) and Kamnyu (10b). The change in the
 15694 relative ordering between the vowel-contracting prefixes and the second person
 15695 prefix has modified the structure of the preverbal system: the Kamnyu dialect has
 15696 gained two additional series of preverbs, but lost one slot in the verbal template
 15697 (§11.2).

- 15698 (10) a. *nə-tə-a-nuŋemkʰe*

B.PREVERB-2-IFR-be.lean

15699 ‘You became lean.’ (Tatshi dialect, heard in context)

- 15700 b. *ŋy-tu-nuŋymk^be*
 IFR-2-be.lean
 15701 ‘You became lean.’ (Kamnyu dialect)

15702 Alternatively, it is possible to analyze C- and D-type preverbs in Kamnyu Ja-
 15703 phug as A- and B-type preverbs with vowel fusion following Lin & Luoerwu
 15704 (2003), but there is little Kamnyu-internal data to support such an analysis, since
 15705 D-type preverbs are not segmentable synchronically in this variety.

15706 While in the case of D-type preverbs the vowel fusion approach proposed by
 15707 Lin & Luoerwu (2003) is less attractive in Kamnyu Japhug than in the Tatshi di-
 15708 alect, for the C-type preverbs it is equally applicable to both dialects. First, there
 15709 is no prefix ordering difference between Kamnyu and Tatshi: the 3→3' Aorist
 15710 *a*- prefix posited by Lin Youjing never occurs in verb forms with prefixed per-
 15711 son indexation markers (second person and/or inverse configurations). Second,
 15712 there is arguably one additional trace of the 3→3' Aorist *a*- prefix in the Kamnyu
 15713 dialect: the *ca*- variant of the Apprehensive *cuu*- prefix (§21.7.1) when used with
 15714 transitive verbs in 3→3' form.

15715 There can be little doubt that the fusion hypothesis is correct historically –
 15716 there was a stage where a 3→3' Aorist prefix did exist. However, from a syn-
 15717 chronic point of view, it is not necessary to analyze this prefix as a separate mor-
 15718 pheme. Furthermore, I decided to favour the non-contracting analysis of the pre-
 15719 verbs to avoid potential confusion with the *a*- Denominal (§20.2), Passive (§18.1)
 15720 and Reciprocal (§18.4.1) prefixes.

15721 Another substantial difference between Kamnyu Japhug and the Xtokavian di-
 15722 alects concerns the B-type DOWNWARDS preverb. As shown by Table 15.4 (based
 15723 on Lin 2011: 70), the A- and B-type preverbs in Tatshi are nearly completely iden-
 15724 tical to the corresponding Kamnyu preverbs (except for notational differences
 15725 such as *v* and *ə* instead of *y* and *ɔ*). The only real difference is the DOWNWARDS
 15726 B-type preverb, which is *pjuu*- in Kamnyu but has the form *cə*- with a palatal stop
 15727 instead of a cluster in Tatshi. It is possible that the Tatshi palatal results from the
 15728 palatalization of *p*-, but no other examples of **pj*- → *c*- are known to me. Alterna-
 15729 tively, Kamnyu *pjuu*- (and D-type *pjy*-) could be analogically based on the A-type
 15730 preverb *puu*- . Another possible origin for the *cə*- of xtokavian dialects is the base
 15731 -*ki* DOWNWARDS found in the adverbs *aki* and *tçeki* (§15.1.1.4).

15.1.1.4 Orientation preverbs and orientation nouns and adverbs

15732 Excluding the unspecified orientation, there is a one-to-one relation between
 15733 the orientation preverbs, the egressive postpositions (§8.2.10, Table 8.1), locative
 15734

Table 15.4: Orientation preverbs in Tatshi Japhug

Orientation	A	B
Up	<i>tu-</i>	<i>tu-</i>
Down	<i>pə-</i>	<i>cə-</i>
Upstream	<i>lu-</i>	<i>lu-</i>
Downstream	<i>tʰə-</i>	<i>cʰə-</i>
Eastwards	<i>kv-</i>	<i>ku-</i>
Westwards	<i>nə-</i>	<i>ŋə-</i>

15735 relator nouns (§8.3.4.1) and orientation adverbs (§22.2.6), as the data in Table 15.5
 15736 show.

15737 The initial consonant of the orientation preverbs is identical to that of the
 15738 locative adverbs (Table 15.5), except for (i) the WESTWARDS orientation with a
 15739 nasal *n*- instead of a prenasalized *nd*- (ii) the DOWNTOWARDS orientation, which
 15740 corresponds to -*ki* in some adverbial forms (*aki* and *tceki*).

15741 The vocalism of the preverbs is only partially predictable from that of the cor-
 15742 responding adverbs: the prefixes *tʰu-* and *nu-* could be seen as the *status construc-*
 15743 *tus* of the adverbs *tʰi* ‘downstream’ and *ndi* ‘westwards’ with -*i* → -*u* alternation,
 15744 but the pattern is less clear in the remaining preverbs. In the case of the UPWARDS
 15745 preverbs, the *t*- prefixes are more likely to be related to the -*tu* root found in the
 15746 adverbs *atu* and *tçetu* rather than the -*taš* root found in the locative noun *u-taš*
 15747 (on which see §8.3.4.3).

15748 The irregular consonantal correspondence between the preverb *nu-* and the
 15749 adverb *ndi* of the DOWNTOWARDS orientation could be interpreted in three ways.

15750 First, the preverb could have been grammaticalized from the adverb, and a
 15751 sound change **ndi-* → *nu-* could have taken place once it had become a prefix, due
 15752 to a phonotactic constraint against prenasalized stops (and complex segments in
 15753 general) in prefixal position (§11.2.4). This hypothesis is unlikely however, be-
 15754 cause orientation preverbs are precisely the only prefixes that appear to violate
 15755 the phonotactic constraints observed by all other elements of the prefixal chain,
 15756 as shown in particular by the presence of aspirated segments (*tʰu-*), laterals (*lv-*)
 15757 and clusters (*pju-*).

15758 Second, the adverb *ndi* could originate from a compound, whose first element
 15759 *n*- would come from the same etymon as the WESTWARDS preverb *nu-*.

15760 Finally, the possibility that the preverb *nu-* and the adverb *ndi* are historically
 15761 unrelated should also be considered.

15762 The strong resemblance between the preverbs and the locative adverbs could
 15763 be interpreted as due to a relatively recent grammaticalization. However, just as
 15764 in the case of the relation between pronouns and indexation suffixes (§14.8.1), the
 15765 possibility of mutual contamination between partially cognate paradigms has to
 15766 be taken into consideration.

Table 15.5: Orientation preverbs, egressive postpositions and locative nouns and adverbs

Orientation	A-preverbs	Locative Adverbs	Egressive	Locative relators	Locative distal adverbs
Upwards	<i>tʂ-</i>	<i>taʂ</i>	<i>çanṭaʂ</i>	<i>u-taʂ</i>	<i>tçetu</i>
Downwards	<i>pɪu-</i>	<i>pa</i>	<i>çanpɑ</i>	<i>u-pa</i>	<i>tçeki</i>
Upstream	<i>lʂ-</i>	<i>lo</i>	<i>çanlo</i>	<i>u-lʂcu</i>	<i>tçelo</i>
Downstream	<i>tʰu-</i>	<i>tʰi</i>	<i>çanṭʰi</i>	<i>u-tʰʂcu</i>	<i>tçetʰi</i>
Eastwards	<i>kʂ-</i>	<i>kuʂ</i>	<i>çankuʂ</i>	<i>u-kʂcu</i>	<i>tçekuʂ</i>
Westwards	<i>nɪu-</i>	<i>ndi</i>	<i>çanndi</i>	<i>u-ndʂcu</i>	<i>tçendi</i>

15.1.1.5 Verbs incompatible with orientation preverbs

15767 In the West Gyalrongic languages, including Stau (Jacques et al. 2017: 601) or
 15768 Khroskyabs (Lai 2017: 311), some verbs never take orientation preverbs even in
 15769 the Imperative and Aorist. This appears to be an archaic feature, as it is restricted
 15770 to a very small set of cognate verbs, for instance Stau *vðə* ‘see’ and Khroskyabs
 15771 *vðē* ‘see’. No such phenomenon exists in Japhug.³ The Japhug cognates of West
 15772 Gyalrongic preverb-less verbs regularly take orientation preverbs (for instance,
 15773 *mto* ‘see’ selects the DOWNWARDS orientation, see §15.1.5.9).

15774 A handful of verbs never occur with orientation preverbs in Japhug, but this
 15775 phenomenon is completely different from the West Gyalrongic case. In Japhug,
 15776 preverb-less verbs have a defective paradigm, and only occur in one TAME cat-
 15777 egory. Two of them (*mr-xsi* ‘it is not known’ and *kṛtupa* ‘tell’, §14.3.4) are only
 15778 attested in the Factual Non-Past, and the absence of preverbs is thus regular. The
 15779 existential verbs *yṛzu* ‘exist’ and *maje* ‘not exist’ are only found in the Sensory
 15780 Evidential (§14.2.2, §21.3.2), which is normally marked by the preverb *nɪu-*, and
 15781 can be considered to be the suppletive forms of *tu* ‘exist’ and *me* ‘not exist’, re-
 15782 spectively.

³Still, there are some indirect clues that *ti* ‘say’ could have had irregular preverbless forms at an earlier stage (§21.3.1.4).

15.1.2 Orientable verbs

Most verbs in Japhug have one or several lexicalized orientation(s) (§15.1.5), and when used with preverbs, these no longer express spatial orientation or direction. Yet, there is a subclass of verbs, in which the preverbs retain their original spatial meaning: these are called in this grammar “orientable verbs”.

The defining feature of these verbs is not simply the ability to take any of the six orientation preverbs, but more importantly their compatibility with the *unspecified orientation* (§15.1.1.1), which is never used as a lexicalized orientation.

Orientable verbs can be subdivided into three main categories: motion verbs ('go, 'come' etc), manipulation verbs ('bring', 'take' etc) and orienting verb ('look towards', 'turn towards' etc). In addition, some stative verbs can be converted into orientable verbs. This section presents the specificities of a sample of these categories, and then describes the uses of preverbs to express spatial direction.

15.1.2.1 Motion verbs

Motion verbs in Japhug can be subdivided into four categories, depending on on their transitivity and on whether they select a local phrase.

First, allative motion verbs select a locative phrase (in the absolute §8.1.8, with a locative postposition §8.2.4 and/or a relator noun §8.3.4) expressing the goal / direction of the motion. The most common allative verbs are *ce* 'go' and *yi* 'come' (§15.1.2.3), which can also take a purposive complement (§16.1.1.6).

Other allative verbs include *zyut* 'reach, arrive' (11), *cit* 'move', *p^hyo* 'flee', *mtsas* 'jump', *cq^hl^ht* 'disappear' and *jyrt* 'turn around and go back', and derived vertitive verbs (§19.2) such as *nuce* 'go back'.

The orientation preverbs of allative verbs express the trajectory towards the goal, as in (11). Note here the orientation concord between the EASTWARDS preverb *ko*- and the locative relative noun *w-kycu* 'east of' (§15.1.2.7).

- 15810 (11) *w-kycu tce icq^ha mts^hu kui-wyrum nur yu*
 3SG.POSS-east LOC the.aforementioned lake SBJ:PCP-be.white DEM GEN
w-tas nutcu ko-zyuit-ndzi.
 3SG.POSS-on DEM:LOC IFR:EAST-reach-DU
 'In the east from there, they arrived at the white lake.' (28-smAnmi, 273)

In addition, reflexive-causative derivations from allative verbs, or from verbs of relative location, such as *zyrszyut* 'manage to reach' and *zyrsyrbat* 'move closer' from *zyut* 'arrive' and *armbat* 'be near' (§15.1.2.5, §18.3.4.3), can also be allative verbs.

15817 There is always an implicit goal with *ce* ‘go’, *yi* ‘come’ and *zyut* ‘arrive’, even
 15818 when it is not overt, as in (12). In this example, the locative adverb *alo* ‘upstream’
 15819 (here ‘closer to the mountain’, see §15.1.3.2) refers to the path of the motion, not
 15820 its goal. The goal, being encoded by the EASTWARDS preverb, would have to be
 15821 expressed with a eastwards locative noun or adverb (§15.1.2.7).

- 15822 (12) *alo ny alo kyr-ye-a ma ui-yyri*
 upstream ADD upstream AOR:EAST-come[II]-1SG LNK 3SG.POSS-front
 15823 *ku-kui-yi tce, nui-yuutsʰyduy.*
 IPFV:EAST-GENR:S/O-come LNK SENS-be.hot
 15824 ‘I came (here, eastwards from the point of origin) by (the road that lies)
 15825 closer to the mountain, when one comes by the (road that is located) in
 15826 the front, it is too hot.’ (conversation, 140510)

15827 Second, the verb *łor* ‘come out’ is an ablative motion verb, selecting a locative
 15828 phrase expressing the point of departure of the motion event, as *ndzom u-pa nutçu*
 15829 ‘from under the bridge’ and *tu-ci u-rkuu nutçu* ‘from the side of the river’ in (13)
 15830 and *tumunymkʰa zuu* ‘from heaven’ in (14). The preverb refers to the direction
 15831 from this point of origin to the goal (which may be left unspecified), a motion
 15832 upwards in (13), and downwards in (14).

- 15833 (13) *tce ndzom u-pa nutcu tuu-ci u-rkuu*
 LNK bridge 3SG.POSS-under DEM:LOC INDEF.POSS-water 3SG.POSS-side
 15834 *nutcu pyxtcu nui to-nui-łor tce*
 DEM:LOC bird DEM IFR:UP-AUTO-come.out LNK
 15835 ‘The bird came out from under the bridge, near the river.’ (2002 qaCpa,
 15836 191)
- 15837 (14) *tumunymkʰa zuu pjy-nui-łor-nui.*
 heaven LOC IFR:DOWN-AUTO-come.out-PL
 15838 ‘(They) came down from heaven.’ (150828 niulang-zh, 48)

15839 The verb *yi* ‘come’ sometimes selects a locative phrase referring to the source
 15840 of the motion, rather than to the goal, as shown by (15), describing an action
 15841 similar to (14).

- 15842 (15) *spikuku zo tce tumunymkʰa nutcu, qro χsum*
 every.day EMPH LNK heaven DEM:LOC pigeon three
 15843 *pjui-yi-nui*
 IPFV:DOWN-come-PL
 15844 ‘Everyday, three pigeons came down from heaven.’ (31-deluge, 47)

15845 Another ablative verb is the reflexive-causative *z̥yrs̥v̥rq̥hi* ‘move further away’
 15846 derivation from the stative verb *arq̥hi* ‘be far’ (see §15.1.2.5).

15847 Third, atelic motion verbs do not select a locative phrase. This category in-
 15848 cludes verbs expressing the speed of motion (*r̥juy* ‘run’, *ŋke* ‘walk’), or non-terrestrial
 15849 motion (*nuqambumbjom* ‘fly’, *ndžas* ‘swim’). With these verbs, when a locative
 15850 phrase is present, it generally indicates the path of the motion, not the goal, as
 15851 in (16).

- 15852 (16) <*bazi> u-ŋgw̥ ri t̥-ŋke-a ma, kuu-yrq̥hi k̥-ce*
 15853 yard 3SG.POSS-in LOC AOR-walk-1SG LNK SBJ:PCP-be.far INF-go
 mua-ku-c̥a-a.
 15854 NEG-PRS-can-1SG

‘I had a walk in the yard, I cannot go very far.’ (conversation, 2017-09-21)

15855 To specify a goal, the atelic motion verb is usually conjoined with an allative
 15856 verb, in particular *ce* ‘go’ or *yi* ‘come’, as in (17).

- 15857 (17) *r̥ymts̥bu u-p̥cos t̥ce jo-ndžas t̥ce jo-ce.*
 15858 sea 3SG.POSS-side LOC IFR-swim LNK IFR-go
 ‘He swam towards the sea.’ (150830 baihe jiemei-zh, 212)

15859 With the verb *r̥juy* ‘run’ there are apparent examples of locative phrases indi-
 15860 cating the goal as in (18), but only in texts translated from Chinese, and this may
 15861 be a calque, though such examples are not considered clumsy by Tshendzin.

- 15862 (18) *r̥jara u-ŋgw̥ c̥-r̥juy ri,*
 15863 yard 3SG.POSS-in IFR:DOWNSTREAM-run LNK
 ‘He ran out into the yard.’ (140505 bulaimei-zh, 106)

15864 The verb *ŋke* ‘walk’ is barely attested with the unspecified orientation pre-
 15865 verbs; it only occurs with these prefixes when in a serial verb construction (§25.4.1)
 15866 with an allative motion verb, as in (19). When used on their own, the UPWARDS
 15867 preverbs occur to express unspecified orientation, as in (16) above.

- 15868 (19) *t̥ce jo-ŋke jo-ce t̥ce t̥ce, <changcheng> [...] u-kui-βzu*
 15869 LNK IFR-walk IFR-go LNK LNK great.wall 3SG.POSS-SBJ:PCP-make
 ra nui-čki t̥ce jo-zyut.
 15870 PL 3PL.POSS-DAT LOC IFR-arrive
 15871 ‘She went (there) on foot and arrived where people were building the
 Great Wall.’ (150827 mengjiangnv-zh, 147-149)

15872 The distributed action verb *nycuqe* ‘go around’ (from *ce* ‘go’) does not take defi-
 15873 nite goals (§19.4), and in addition is only compatible with unspecified orientation
 15874 preverbs.

15875 Fourth, transitive motion verbs include *βji* ‘chase, catch up with’, *pjyl* ‘bypass,
 15876 cross, avoid’, *pyaz* ‘turn over’ and *numgla* ‘step over’, which can also occur with
 15877 the non-specific orientation preverbs, as in (20). The object of these verbs is the
 15878 location or entity around which (or through/towards which) the motion event
 15879 takes place.

- 15880 (20) *zgo tʰystuy ja-nnui-pyab-ndzi, tui-ci*
 mountain how.many AOR:3→3'-AUTO-turn.over-DU INDEF.POSS-water
 15881 *tcʰi jarma ja-n-numgla-ndzi my-xsi ma,*
 what about AOR:3→3'-AUTO-cross-DU NEG-GENR:know LNK
 15882 ‘It is not known how many mountains and rivers they crossed.’
 15883 (qajdoskAt 2002, 50)

15884 The transitive verb *nunqʰu* ‘go along, follow’ (§20.7.2) is also compatible with
 15885 the unspecified orientation preverbs, but can also select the UPWARDS preverbs
 15886 as default, like *ŋke* ‘walk’.

15.1.2.2 Manipulation verbs

15887 Manipulation verbs are transitive verbs expressing a motion involving two enti-
 15888 ties.⁴ The subject, generally (but not exclusively) animate causes the object (proto-
 15889 typically, an inanimate) to move (in some case together with him/her/it). As
 15890 in the case of motion verbs, there are several categories depending on whether
 15891 a locative phrase is selected and the nature of the motion causation.

15892 Allative manipulation verbs select a locative phrase indicating the goal of the
 15893 motion, such as <*xuexiao*> *yuu u-*<*caochang*> *u-χcyl* ‘the center of the school’s
 15894 playground’ in (21) or *srtṣʰa kuu-yrqʰi zuu* ‘to a place far away’ in (22). The presence
 15895 of a locative phrase is however always optional (§14.5.4).

- 15896 (21) *ji-kʰutsa sɻ-rku tsʰaŋ nuunua,*
 1PL.POSS-bowl OBL:PCP-put.in cupboard DEM
 15897 *ta-nyjobjor-nuu ta-nutʰaj-nuu qʰe*
 AOR:3→3'-lift.up.and.go.around-PL AOR:3→3'-lift.up.and.carry-PL LNK

⁴The term ‘caused accompanied motion’ has been suggested to replace ‘manipulation’ (Margetts et al. 2019).

15 Orientation and associated motion

- 15899 *r̥canuu*, <*xuexiao*> *yur u-<caochang>* *u-χcyl* *zo*
 UNEXP:DEG school GEN 3SG.POSS-playground 3SG.POSS-center EMPH
 15900 *na-tsum-nuu*.
 AOR:3→3':EAST-take.away-PL
 'They lifted up the cupboard where we put our bowls, and carried it to
 15902 the center of the school's playground.' (150831 BZW kAnArRaR, 22)
- 15903 (22) *u-pci* *zui jú-wy-sco*, *sytčʰa kui-yrqʰi* *zui*
 3SG.POSS-outside LOC IPFV-INV-send place SBJ:PCP-be.far LOC
 15904 *pjúu-wy-lxt* *ma-púu-wy-sat* *ra*
 IPFV:DOWN-INV-release NEG-IMP-INV-kill be.needed:FACT
 15905 *tu-kui-ti* *jui-ŋu*
 IPFV:DOWN-GENR:S/O-say SENS-be
 15906 'One has to send (the snake) outside, to a place far away without killing it,
 15907 people say.' (2010-11, 11)
- 15908 Allative manipulation verbs can be divided into several subcategories. Verbs of
 15909 transportation, in which the subject carries the object and moves together with
 15910 it/him include *tsum* 'take away' and *yut* 'bring', the transitive counterparts of
 15911 the motion verbs *ce* 'go' and *yi* 'go' (§15.1.2.3), *ru* 'fetch, bring' (discussed in more
 15912 detail in §15.2.9). Verbs of accompanied motion, whose subject and objects move
 15913 together along the same trajectory, include *mtsʰi* 'guide', *no* 'drive away', *sco* 'send,
 15914 see off' and *lxt* 'release'.⁵ The latter two verbs can also refer to transportation in a
 15915 vehicle, as in (23). Verbs of accompanied motion can occur with a locative phrase,
 15916 but such uses are very rare.
- 15917 (23) *u-wa* *kui yur-lý-wy-lxt-i*
 3SG.POSS-father ERG CISL-IFR:UPSTREAM-INV-release-1PL
 15918 'His father give us a ride here (from Chengdu to Mbarkham).' (elicited)
- 15919 Allative verbs of induced motion comprise the causative derivations of motion
 15920 verbs, in particular *suye* 'invite, cause to come' and *suxce* 'send, cause to go'. Only
 15921 the object undergoes the motion, as in (24).⁶
- 15922 (24) *rjuyul rjyskxt ui-tas* *tý-wy-sux-ce* *jui-ŋu*
 silver stairs 3SG.POSS-on IFR:UP-INV-CAUS-go SENS-be
 15923 'They made her go up the silver stairs.' (2003 Kunbzang, 251)

⁵This verb has many functions as a light verb (§22.4.2.2), but one of its basic meanings when used on its own is 'see off' like *sco*.

⁶However, the motion verb *rjuy* 'run' has a causative form *surjuy* 'run away with' which expresses motion of both subject and object (§17.2.5.10).

15924 The verbs *mja* ‘take’ (§19.7.3) and *tçyt* ‘take out’ when used as manipulation
 15925 verbs select a locative phrase which can refer to the goal, as in (26), but also in
 15926 some cases to the point of origin of the motion, as in (25). These verbs do not
 15927 necessarily imply translational motion of the subject (only motion of the hands).

- 15928 (25) *jy-mtsur q^he tcendyre w-p^hunŋgu nutcu icq^ha nu,*
 IFR-be.hungry LNK LNK 3SG.POSS-fold.of.clothes DEM.LOC FILLER DEM
 15929 *qajyi ci jy-tçyt tce to-nu-nzda.*
 bread INDEF IFR-take.out LNK IFR-AUTO-eat
 15930 ‘He became hungry, took a piece of bread from the folds of his clothes
 15931 and ate it.’ (150830 san ge heshang-zh, 139)

- 15932 (26) *rjymts^hu w-mju zuu ju-tcxt-nu tce*
 ocean 3SG.POSS-border LOC IPFV-take.out-PL LNK
 15933 ‘(The whalers) take (the whale) to the shore of the ocean.’ (160703 jingyu,
 15934 35)

15935 Atelic manipulation verbs cannot select a locative phrase. Some atelic verbs are
 15936 not orientable, and cannot take the unspecified orientation preverbs. For instance,
 15937 *nuthaj* ‘carry’ (a verb borrowed from Chinese, see §20.11) is only compatible with
 15938 the UPWARDS orientation, and requires to be used with an allative verb such as
 15939 *tsum* ‘take away’ to specify the goal and the orientation, as in (21) above.

15.1.2.3 Motion deixis

15941 Motion and manipulation verbs both have a contrast between translocative (*ce*
 15942 §15.1.2.1, *tsum* §15.1.2.2) and cislocative (*yi* §15.1.2.1, *yut* §15.1.2.2), like the corres-
 15943 ponding associated motion prefixes (*cuu-* §15.2.1.2, *yuu-* §15.2.1.1).

15944 The translocative and cislocative verbs can often be translated as ‘go/take
 15945 away’ and ‘come/bring’, respectively. However, these translations may be mis-
 15946 leading, as the criteria for determining the deictic center in Japhug are not iden-
 15947 tical to those of Chinese or English.

15948 The cislocative verbs are required not only in case of motion towards the loca-
 15949 tion of the speaker, they have to be used whenever a motion is directed towards
 15950 a spatial location related either to the speaker or the addressee, even in the case
 15951 of motion from the location of the speaker to that of the addressee. For instance,
 15952 while in Chinese (and most languages of Europe) both 来你家 <lái nǐ jiā> ‘come
 15953 to your house’ and 去你家 <qù nǐ jiā> ‘go to your house’ are grammatical, in
 15954 Japhug only the cislocative verbs are employed in this case. In (27) for instance,
 15955 replacing *ju-yi-a* by *ju-ce-a* would result in a very clumsy clause.

15 Orientation and associated motion

- 15956 (27) *azō tʰyjtcu jamar ny-kʰa ju-yi-a pe?*
1SG when about 2SG.POSS-house IPFV-come-1SG be.good:FACT
15957 ‘At what time should I go to your house?’ (elicited)

15958 Similarly, the cislocative is necessary when both addressee and speaker go
15959 together, in sentences with the secutive *wu-rca* (§8.3.2) such as (28), (29) (see also
15960 62 in §15.1.3.3). The translocative *ce* ‘go’ is never attested in such contexts.

- 15961 (28) *a-rca jy-yi*
1SG.POSS-following IMP-come
15962 ‘Come with me.’ (several attestations)

- 15963 (29) *ny-rca tu-yi-a ra ma kutcu*
2SG.POSS-following IPFV:UP-come-1SG be.needed:FACT LNK here
15964 *azō-sti ku-ryzi-a māj-cʰa-a*
1SG-alone IPFV-stay-1SG NEG:SENS-can-1SG
15965 ‘I am going (to heaven) with you, I cannot stay here alone.’ (02-deluge, 79)

15966 The translocative manipulation verb *tsum* ‘take away’ however can be used
15967 with a second person secutive, as in (30).

- 15968 (30) *ny-rca tu-kua-tsum-a ra*
2SG.POSS-following IPFV:UP-2→1-take.away-1SG be.needed:FACT
15969 ‘Take me with you (to heaven).’ (02-deluge, 70)

15.1.2.4 Orienting verbs

15971 Orienting verbs express change of orientation without translational motion, in-
15972 volving a pointing/aiming gesture towards a goal. This category includes the
15973 intransitive *ru* ‘look at’ (§14.2.4), the transitive verbs *ctʰuz* ‘turn towards’ and *tʰu*
15974 ‘built’ (of roads or bridges; this verb also has additional meanings such as ‘leave
15975 (a trace)’ as in 33 in specific contexts), as well as the anticausative *ndu* ‘be spread’
15976 (§18.5).

15977 With the verb *ctʰuz* for instance, the preverb indicates the orientation towards
15978 which the object is directed, and it can correlate with locative adverbs (31) or
15979 locative phrases (32).

- 15980 (31) *tce tcekuu zuu rŋual-k^bri ndi ny-ct^buz, tcendi*
 LNK east.DISTAL LOC silver-seat west IFR:WEST-turn.towards west.DISTAL
 15981 *zui kuu ko-ct^buz tce,*
 LOC east IFR:EAST-turn.towards LNK
 15982 ‘In the east side, he turned the silver seat towards the west, and in the
 15983 west side he turned (the other seat) towards the east.’ (smAnmi2003, 157)
- 15984 (32) *tce nuu k^buutsa nuu tu-ct^buz-nuu, tui-mŋaab*
 LNK DEM bowl DEM IPFV:UP-turn.towards-PL INDEF.POSS-eye
 15985 *u-ŋa ri tu-ct^buz-nuu kui-fse tce,*
 3SG.POSS-below LOC IPFV:UP-turn.towards-PL INF:STAT-be.like LNK
 15986 ‘(The lamas) turn the bowl upwards below the eye (of the patient).’
 15987 (27-tApGi, 20)

15988 Orienting verbs are also compatible with unspecified orientation preverbs, as
 15989 example (33) shows.

- 15990 (33) *kui-fsoŋ u-ŋroŋ kui-fse ci*
 SBJ:PCP-be.bright 3SG.POSS-trace SBJ:PCP-be.like INDEF
 15991 *ju-t^bi tce,*
 IPFV:UNSPECIFIED-leave.trace[III] LNK
 15992 ‘The shooting star leaves something like a bright trail.’ (29-mWBZi, 92)

15.1.2.5 Conversion to orientable verbs

15994 A handful of stative verbs can take the unspecified orientation preverbs and be
 15995 converted to dynamic orientable verbs. The stative verbs of relative location *arm-*
 15996 *bat* ‘be near’ and *arq^bi* ‘be far’ can be used in the meanings ‘move closer’ and
 15997 ‘move further away’ identical to the reflexive-causative derived verbs *zŋysyrm̥bat*
 15998 ‘move closer’ and *zŋysyrrq^bi* ‘move further away’ (§15.1.2.1, §18.3.4), as in (34).

- 15999 (34) *jŋ-armbat tce ku-rtos tce, tceri uzo u-ŋi bnuuz*
 AOR-be.close LNK IPFV-look LNK LNK 3SG 3SG.POSS-elder.sibling two
 16000 *nuni pjŋ-ŋu-ndzi.*
 DEM:DU IFR,IPFV-be-DU
 16001 ‘As he moved closer, he saw that (the people about to be executed) were
 16002 his brothers.’ (140507 jinniao-zh, 334)

16003 Finally, the stative verb *nat* ‘be tired’ occurs with the indefinite orientation
 16004 preverbs in the meaning ‘become tired (from walking/running)’, as in (35).

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- 16005 (35) *mur-jy-pat zo myctsə jo-ce*
NEG-AOR-be.tired EMPH until IFR-go
16006 ‘He went (after them) until he became tired.’ (160706 poucet6, 45)

15.1.2.6 Complement clauses

16008 Some complement-taking verbs, in particular phasal verbs (§24.5.6.2) such as *za*
16009 ‘begin’, select the orientation of the verb in the complement clause, and can be
16010 used with indefinite orientation preverbs (§24.3.5).

15.1.2.7 Orientation concord

16012 Clauses containing a orientable verb generally show agreement between the
16013 orientation of the preverb and that of orientation nouns and adverbs (§8.3.4.1,
16014 §15.1.1.4).

16015 In (36) for instance, the UPSTREAM *lo-* and *cʰy-* DOWNSTREAM preverbs correlate
16016 with the adverbs *alo* ‘upstream’ and *atʰi* ‘downstream’, respectively, expressing
16017 here a back and forth motion.

- 16018 (36) *alo ny lo-rfuy* *atʰi ny*
upstream ADD IFR:UPSTREAM-run downstream ADD
16019 *cʰy-rfuy*
IFR:DOWNSTREAM-run
16020 ‘He ran upstream and downstream.’ (160720 kandZislama, 67)

16021 In (37), the WESTWARDS *jy-* preverb corresponds to the orientation relator
16022 noun *w-ndycu* ‘west of’. In the same story, the main character comes back to the
16023 same place on the return trip, from the opposite direction, and the EASTWARDS
16024 orientation preverb and relator noun are found instead (example 11, §15.1.2.1).

- 16025 (37) *w-ndycu tce, mtsʰu kui-wyrum ci jy-k-ytuy-ci.*
3SG.POSS-west LOC lake SBJ:PCP-be.white INDEF IFR:WEST-PEG-meet-PEG
16026 ‘In the west from there, he came upon a white lake.’ (28-smAnmi, 102)

15.1.3 The tridimensional system

16028 Orientation preverbs in Japhug are organized in a three-dimensional system (§15.1.1.1)
16029 like spatial postpositions, relator nouns and adverbs (§8.2.10, §8.3.4.1, §22.2.6).

Very similar orientation systems are found in other Gyalrong languages, in particular Tshobdun (Sun 2000a) and the Cogtse dialect of Situ (Lin 1993; Lin 2002; Lin 2017).⁷

The present section describes the concrete spatial uses of each of the three dimensions (vertical, riverine and solar)⁸ with orientable verbs. The discussion here not only applies to orientation preverbs, but also to all nouns, postpositions and adverbs encoding orientation.

15.1.3.1 The vertical dimension

The basic meaning of the UPWARDS and DOWNWARDS preverbs, adverbs and locator nouns is to encode relative position or motion on the axis that is perpendicular to the ground. A typical use of these preverbs with orientable verbs for instance is to describe motion up and down trees or stairs, as shown by (38) and (39).

- (38) *tcʰi nuu yuu ui-tax tʂ-ari nuu-ŋu*
 tree.trunk.stairway DEM GEN 3SG.POSS-on AOR:UP-go[II] SENS-be
 'He went up the tree trunk stairway.' (2005 Kunbzang, 65)

- (39) *rjvskxt to-syglvglvy zo pʃr-ce tce,*
 stairs IFR-make.trampling.noise EMPH IFR:DOWN-go
 'She hurtled down the stairs.' (Nyima wodzer2002, 106)

The DOWNWARDS preverb also expresses downwards motion into another medium such as water, as in (40).

- (40) *tcendyre tuu-pjxt kuu tui-ci uu-ŋgur*
 LNK NMLZ:ACTION-regret ERG INDEF.POSS-water 3SG.POSS-in
pjx-mtsax qʰe pjx-si.
 IFR:DOWN-jump LNK IFR-die
 'Out of regret, he jumped into the water and died.' (28-qAjdoskAt, 187)

The rising and setting of the sun is also expressed with the vertical preverbs (*to-łor* IFR:UP-come.out '(the sun) rose' vs. *pjv-čqʰlxt* IFR:DOWN-disappear '(the sun) set'); alternatively, the solar dimension is also used (§15.1.3.3).

⁷Not all Core Gyalrong languages, however, have a tridimensional orientation system: Zbu (Gong 2018) and the Bragbar dialect of Situ (Zhang 2020) are exceptions.

⁸The labels 'riverine' and 'solar' follow Sun's (2000a) and Lin's (2002) work on Tshobdun and Situ. Previous authors (Lin 1993) have analyzed the 'riverine' and 'solar' dimensions as 'river-mountain' and 'upstream-downstream', respectively (see the discussion in §15.1.3.2).

The vertical dimension preverbs also express relative altitude, in particular when the slope between two places is particularly steep. Alternatively, the riverine preverbs UPSTREAM / DOWNSTREAM (§15.1.3.2) occur either when the slope is less steep, or when following a water stream. This dimension can also be used between far away places when the difference in altitude is perceived to be particularly conspicuous. For instance, the orientation UPWARDS is selected to describe a journey from Gyalrong areas to central Tibet, and DOWNWARDS for a trip to Chinese areas, as in (41) and (42) (see also 193 in §15.2.4). The riverine dimension is alternatively possible however to refer to motion between Gyalrong and Chinese areas (§15.1.3.2).

- 16065 (41) *pot st^huci kuu-yrq^{hi} me ri, nutcu tx-ari*
Tibet such.as SBj:PCP-be.far not.exist:FACT LNK DEM.LOC AOR:UP-go[II]

16066 *cti tce*

be.AFF:FACT LNK

16067 ‘There is no (place) further away (from here) than Tibet, but he went
16068 there.’ (meimeidegushi, 32)

- 16069 (42) *rja pjy-ce tce*

Chine IFR:DOWN-go LNK

16070 ‘He went to China.’ (Gesar, 219)

16071 In some cases, the orientation DOWNWARDS is selected when the path includes
16072 a section down a mountain, even if the axis is oriented in the upstream/down-
16073 stream or east/west directions. For instance, the DOWNWARDS orientation pre-
16074 verb appears to express a motion from *krmjuu* Kamnyu to *smulju* Smeliu village,
16075 as explained in example (43), although the path between them follows the east-
16076 west axis. It is however alternatively possible to use the EASTWARDS preverbs to
16077 describe the trip from Kamnyu to Smeliu (and the WESTWARDS preverbs for the
16078 opposite journey).

- 16079 (43) “*rqaco pjw-ce-a*” *tu-kui-ti*, “*smulju pw-ari-a*”
TOPO IPFV:DOWN-go-1SG IPFV-GENR-say TOPO AOR:DOWN-go[II]-1SG

16080 *tu-ti-nuu tce ma nuunu zgo nuu tu-kui-ce tce,*

IPFV-say-PL LNK LNK DEM mountain DEM IPFV:UP-GENR:S/O-go LNK

16081 *akui tce pa pjw-kui-ce nuu-ra loβ, tce*

east LOC down IPFV:DOWN-GENR:S/O-go SENS-be.needed SFP LNK

16082 *nündza nuu-ŋu.*

for.this.reason SENS-be

16083 ‘People say ‘I will go (down) to Rqakyo’, or ‘I went (down) to Smeliu’, this

16084 is because one has to go up a mountain and go down on the east side.
16085 (150904 akW andi-zh, 16)

16086 15.1.3.2 The riverine dimension

16087 The basic meaning of the UPSTREAM and DOWNSTREAM preverbs, adverbs and
16088 locator nouns is to express motion or relative position along the axis of a flowing
16089 river or streamlet.

The downstream preverbs are systematically used to refer to the direction of water flow. In particular, the imperfective participles *c^huu-kuu-yi* or *c^huu-kuu-če* with the DOWNSTREAM preverb are sometimes added to the noun *tu-ci* ‘water’ to specify the meaning ‘river, stream’ (*tu-ci c^huu-kuu-yi*, literally ‘the water that is coming downstream’) as in (44) and (46).

- 16095 (44) *alo ji-tur-ci c^hui-kui-yi,*
 upstream 1PL.POSS-INDEF.POSS-water IPFV:DOWNSTREAM-SBJ:PCP-come
 16096 *<jiaomujiao> tur-ci nuu*
 pl.n INDEF.POSS-water DEM
 16097 ‘Our river upstream (in Kamnyu), the Kyomkyo river...’ (150820
 16098 ZNGWloR, 11)

In (45), the DOWNSTREAM preverb is not only used with motion verbs in the collocation with the nouns *tç'it'hyn* ‘mudslide’ or *tuyxt* ‘landslide’, it is also found on the verb *c'h&-wy-yut* to describe a mudslide taking away an animal with it.

- 16102 (45) *tce tc^hit^hyn c^hy-yi* *tcendyre <dianchang>*
LNK mudslide IFR:DOWNSTREAM-COME LNK power.station
16103 *c^hy-p^hut.* *<dianchang> c^hy-phut,*
IFR:DOWNSTREAM-take.out power.station IFR:DOWNSTREAM-take.out
16104 *nunu tuŋyt t^hu-ye* *nuu uu-rca*
DEM landslide AOR:DOWNSTREAM-come[II] DEM 3SG.POSS-together
16105 *nuteu tce, nuna pui-kui-nuriu* *nuu tyrca*
DEM.LOC LOC COW PST.IPFV-SBJ:PCP-grazing DEM together
16106 *c^hy-wy-yut,* *tua-rdo.*
IFR:DOWNSTREAM-INV-bring one.piece
16107 ‘The mudslide swept the power station. It swept the power station, and
16108 when the landslide happened, it took away a cow that was grazing
16109 (there).’ (160715 nWNa, 2-4)

16110 The direction opposite to that of the flow of water is normally referred to with
 16111 the UPSTREAM preverbs, as in (46).⁹ As shown by (47), the UPSTREAM preverbs
 16112 and adverbs are understood by speakers as specifically referring to the direction
 16113 towards the source of the river (*tcʰipʰuy*, a noun borrowed from 藏语 *tsʰu.pʰugs*
 16114 ‘water source’).

- 16115 (46) *kuki tuu-ci cʰuu-kuu-yi kuki*
 DEM.PROX INDEF.POSS-water IPFV:DOWNTREAM-SBJ:PCP-come DEM.PROX
 16116 *tú-wy-nuinqʰu lu-kuu-ce tce,*
 IPFV-INV-follow IPFV:UPSTREAM-GENR:S/O-go LNK
 16117 ‘(If) you follow this creek upstream...’ (04-cuiniao-zh, 65)

- 16118 (47) *tcʰipʰuy uu-pcos lu-kuu-ce nuu tce*
 source.of.the.river 3SG.POSS-side IPFV:UPSTREAM-gen:S/O-go DEM LNK
 16119 *“lo”, tcʰimtʰa uu-pcos cʰuu-kuu-ce*
 upstream lower.reaches 3SG.POSS-side IPFV:DOWNTREAM-GENR:S/O-go
 16120 *nuu tce “tʰuu-ari-a”, “tʰi” tú-wy-nuu-syrmi*
 DEM LNK AOR:DOWNTREAM-go[II]-1SG downstream IPFV-INV-AUTO-call
 16121 *nuu-ŋu.*
 SENS-be
 16122 ‘One calls going towards the source of the river UPSTREAM, and going
 16123 towards the lower reaches of the river ‘downstream.’ (150904 akW andi,
 16124 24-25)

16125 For motion between localities in the Gyalrong areas located along a river, the
 16126 UPSTREAM and DOWNTREAM orientation are selected in some cases. For instance,
 16127 the UPSTREAM preverbs occur to describe trips from Kamnyu to Tshobdun (or
 16128 Zbu) as in (48), and the DOWNTREAM preverbs for the opposite trip.

- 16129 (48) *tsʰuβdtum kui-sy-suuxcyt ly-ari-a.*
 TOPO SBJ:PCP-APASS-teach AOR:UPSTREAM-go[II]-1SG
 16130 ‘I went to Tshobdun to teach.’ (150819 kumpGa, 78)

16131 The riverine dimension preverbs can also be used in the case of trips to far
 16132 away places up or down the course of a river. For instance, a journey to Chinese
 16133 areas can be described using the DOWNTREAM orientation as in (49), though
 16134 due to the considerable altitude difference the orientation DOWNTWARDS is often
 16135 preferred (compare with example 42, §15.1.3.1).

⁹In (46), the UPWARDS preverb on *nuinqʰu* ‘go along, follow’ is the default orientation, see §15.1.2.1.

16136 (49) *rfa syz kuu-yrq^{hi} me ri, nutcu*
 China COMIT SBJ:PCP-be.far.away not.exist:FACT LNK DEM:LOC

16137 *t^huu-ari cti*
 AOR:DOWNSTREAM-go[II] be.AFF:FACT

16138 ‘There is no (place) further away (from here) than China, but he went
 16139 there.’ (meimeidegushi, 40)

16140 However, in valleys where the main river flows along the east-west axis, the so-
 16141 lar dimension (§15.1.3.3) takes over the riverine dimension. In Mbarkham and the
 16142 towns around it, where the Somang river flows from east to west, the UPSTREAM
 16143 and DOWNSTREAM preverbs cannot be used to refer to the places along the river.
 16144 Rather, the EASTWARDS preverbs occur for the UPSTREAM direction and the WEST-
 16145 WARDS preverb for the downstream orientation. For instance, from Mbarkham
 16146 to Cogtse, located upstream, the EASTWARDS preverb is selected as in (50). For
 16147 Rdzonggag and Bragbar, further downstream (and southwest from Mbarkham),
 16148 the WESTWARDS preverb is used. For shorter trips (on foot or on vehicles) inside
 16149 Mbarkham city, the solar dimension preverbs are also systematically used.

16150 (50) *tcuχtsi ky-ari-j, kuu-nymjo*
 16151 TOPO AOR:EAST-go[II]-1PL SBJ:PCP-watch

‘We went to Cogtse, to visit.’ (conversation, 2013-10-15)

16152 In this environment, the riverine preverbs are used to encode the mountain-
 16153 river slope axis, which is perpendicular to the river axis. This phenomenon has
 16154 been observed in other Gyalrong languages. Lin (2002: 34), in an article about
 16155 Situ where the same reorganisation of preverb dimensions occurs, argues that
 16156 ‘the riverine pair has become generalized for cases where there are no mountain
 16157 creeks in sight, and the orientation markings then encode an opposition between
 16158 higher and lower parts of a slope via metaphorical extension.’

16159 A further extension of the riverine dimension in such geographical environ-
 16160 ments is to encode the orientation perpendicular to that river even in places with
 16161 relatively flat ground without any slope. In localities where the river is exactly
 16162 aligned on the East-West axis, the riverine preverbs thus started to encode the
 16163 North-South axis, with the DOWNSTREAM preverb for the orientation *towards the*
 16164 *river* on this axis, and the UPSTREAM preverb from that *away from the river*.

16165 This perpendicular orientation grid is applied not only on streets (where a mild
 16166 slope is generally perceptible in Gyalrong-speaking valleys), but even extended
 16167 within houses, where the ground is even. For instance, if the toilets are located
 16168 on the side of the building that is closer to the river, and if one happens to be on

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16169 the opposite side of the apartment, one can say (51), even though one remains at
 16170 the same vertical level (all solar and riverine prefixes would also be appropriate,
 16171 depending on the absolute orientations).

- 16172 (51) *jryxt ci c^hu-ce-a*
 toilet a.little IPFV:DOWNSTREAM-go-1SG

16173 ‘I am going to the toilets.’ (heard several times in context)

16174 Some journeys involve a change of orientation. In such cases, the choice of
 16175 the preverb depends on the longest section during the trip. For instance, the road
 16176 from Mbarkham to Kamnyu first goes downstream the Somang river (westwards)
 16177 and then, for a longer distance, upstream the Kyomkyo river (northwards), and
 16178 therefore the UPSTREAM preverbs are required (52).

- 16179 (52) *kympuu mui-ly-tsum-a*
 TOPO NEG-AOR:UPSTREAM-take.away-1SG

16180 ‘I did not take (my mobile phone) to Kamnyu.’ (said after having come
 16181 back to Mbarkham, conversation, 16-02-21)

16182 For the opposite journey (from Kamnyu to Mbarkham), the orientation DOWN-
 16183 STREAM is always selected, as in (53).

- 16184 (53) *tce mbark^hom kuu-ry-βzjoz t^hu-ye-a,*
 LNK TOPO SBJ:PCP-APASS-study AOR:DOWNSTREAM-come[II]-1SG
 16185 ‘I came to Mbarkham to study.’ (140501 tshering skyid, 48)

16186 Given the fact that several contradictory constraints are involved in the choice
 16187 of the riverine vs. solar orientation preverbs, it is not surprising that the ori-
 16188 entations chosen to describe motion from one locality to another in the Japhug
 16189 speaking area is not completely predictable, and that some orientations must be
 16190 analyzed as having been completely lexicalized (§15.1.5).

16191 The DOWNSTREAM preverbs can be used also for motion into water as in (54)
 16192 and (55). They compete in this function with the vertical dimension DOWNTOWARDS
 16193 preverbs (see 40 in §15.1.3.1, an example describing the event referred to in 54 in
 16194 another version of the same story).

- 16195 (54) *clas zo tuu-ci u-ŋgw*
 IDPH(I):immediately EMPH INDEF.POSS-water 3SG.POSS-in
 16196 *c^hy-mts^haB tce pjy-zyy-sat.*
 IFR:DOWNSTREAM-jump LNK IFR-REFL-kill
 16197 ‘He immediately jumped into the water and committed suicide.’
 16198 (qajdoskAt 2002, 117)

- 16199 (55) *βlama nuara kua [...] ts^hyt^hyr lu-lyt-nuu nu-ŋju. tce*
 lama DEM:PL ERG life.release IPFV-release-PL SENS-be LNK
 16200 *tua-ci u-ŋguu s-c^huu-lyt-nuu tce,*
 INDEF.POSS-water 3SG.POSS-in TRAL-IPFV:DOWNSTREAM-release-PL LNK
 16201 ‘The lamas perform life release and release (aquatic animals) into the
 16202 water.’ (140510 wugui, 14-16)

16203 The UPSTREAM preverbs occur to express motion out of the water, as in (56).

- 16204 (56) *<wugui> nuu tua-ci u-ŋguu*
 turtle DEM INDEF.POSS-water 3SG.POSS-in
 16205 *lo-nuu-łok*
 IFR:UPSTREAM-AUTO-come.out
 16206 ‘The turtle came out of the water.’ (elicited, based on a text example)

16207 Metaphorical extensions of the riverine preverbs include the illative/elative
 16208 functions (§15.1.4.2, §15.1.5.1), the orientation in the living room (§15.1.4.4), the
 16209 loom (§15.1.4.5) and various lexicalized uses (§15.1.5.4).

15.1.3.3 The solar dimension

16211 The basic meaning of the EASTWARDS and WESTWARDS preverbs, adverbs and
 16212 locator nouns is to encode the east-west axis. Example (57) for instance shows
 16213 that the orientation encoded by the distal locative adverb *tçendi* is the same as
 16214 that of the place where the sun sets.

- 16215 (57) *turmuk^ha ri tce tcendi ri tʂje u-ʂy-cq^hlyt pcɔʂ ri*
 dusk LOC LNK west LOC sun 3SG.POSS-OBL:PCP-disappear side LOC
 16216 *tu.*
 exist:FACT
 16217 ‘(This star) is found at dusk in the west, at the place where the sun sets.’
 16218 (29-mWBZi,76)

16219 The selection of the EASTWARDS and WESTWARDS preverbs is observed not only
 16220 with the orientational adverbs *tçendi*, *tçekuu* (§22.2.6) and related forms, but also
 16221 with the borrowed cardinal point *çyrpcɔʂ* ‘east’ (from չարքաղ շարքաղ ‘east’) or
 16222 descriptive relative clauses meaning ‘place where the sun sets’ or ‘place where
 16223 the sun rises’ as shown by example (58).

- 16224 (58) *tur-rdo_B numuu, c_Yrpcos_B ko-ce, tur-rdo_B numuu b_Mb_Yyi*
 one-piece DEM east IFR:EAST-go one-piece DEM sun
 16225 *u-sy-cq^hlyt nautcu jy-cq^hlyt.*
 3SG.POSS-OBL:PCP-disappear DEM:LOC IFR:WEST-disappear
 16226 ‘One (of the feathers) went to the east, another one disappeared in the
 16227 direction where the sun sets.’ (140510 sanpian yumao-zh, 17-18)

16228 The WESTWARDS orientation is found to express the motion of the sun with
 16229 both the verbs *to_B* ‘come out’ and *cq^hlyt* ‘disappear’, as in (59). Alternatively, the
 16230 vertical dimension is also used (§15.1.3.1).

- 16231 (59) *tyne jy-nui-to_B*
 sun IFR:WEST-AUTO-come.out
 16232 ‘The sun rose (from the east, towards the west)’. (elicited)

16233 The EASTWARDS orientation is selected to describe trips between localities
 16234 from west to east, for instance from Kamnyu (32°12'N,101°57'E) to Sarndzu (32°09'N,102°07'E)
 16235 (60), and the WESTWARDS orientation for the return journey.

- 16236 (60) *izora tce “syrndzu ky-ari-a” tu-kui-ti jy.*
 1PL LNK TOPO AOR:EAST-go[II]-1SG IPFV-GENR-say be:FACT
 16237 ‘We (in Kamnyu) say “I went (eastwards) to Sarndzu.’ (150904 akW andi,
 16238 21)

16239 In locations where the river is oriented on this axis, the solar dimension is dom-
 16240 inant and the riverine dimension recessive (§15.1.3.2). In Mbarkham city, where
 16241 the river flows from east to west, the EASTWARDS and WESTWARDS preverbs are
 16242 used for the upstream and downstream directions, respectively. This overlap has
 16243 caused previous linguists working on Gyalrong languages (in particular Situ) to
 16244 analyze the solar dimension preverbs and adverbs as encoding the ‘upstream/
 16245 downstream’ axis (see the discussion in Lin 2002).

16246 The solar dimension remains dominant even when the path is not parallel
 16247 to the east-west axis, but oriented southwest-northeast or southeast-northwest.
 16248 For instance, a journey from Mbarkham to Jinchuan or Danba along the Somang
 16249 river, which has a clear southwest orientation, the WESTWARDS orientation is still
 16250 preferred over the DOWNSTREAM orientation.

- 16251 (61) <*jinchuan*> *nur-azyut-i ri*
 TOPO AOR:WEST-arrive-1PL LNK
 16252 ‘When we arrived in Jinchuan...’ (2010-1, 3)

16253 The east/west dimension can even be used in the case of far away countries, as
 16254 between France and China, as shown by the choice of the WESTWARDS preverb
 16255 in (62).

- 16256 (62) *nü-rca* *azo kumy <faguo> jui-yi-a.*
 16257 2SG.POSS-following 1SG also France IPFV:WEST-come-1SG
 'I am going with you to France.' (conversation, 2013)

16258 This usage is also found with *lyt* 'release' in its meaning 'phone' (when occurring in collocation with the Chinese noun 电话 <dianhua> 'phone'), which takes
 16259 the orientation EASTWARDS to describe a phone call from France to China, and
 16260 WESTWARDS for the opposite direction.

- 16262 (63) *uzo kui (<dianhua>) ku-lyt* *cti* *ma, azo*
 16263 3SG ERG phone IPFV:WEST-release be.AFF:FACT LNK 1SG
jui-lat-a *my-k^hu* *tce, andi ku-ryzi tce*
 16264 IPFV:WEST-release-1SG NEG-be.possible:FACT LNK west IPFV-stay LNK
wi-<dianhuahaoma> *a-ky-ti* *my-k^hu*
 16265 3SG.POSS-phone.number 1SG.POSS-INF-say NEG-be.possible:FACT
 16266 'It is he who calls (me on the phone), I cannot call him, he lives in the
 'west (in France), I cannot say his phone number.' (conversation, 16-12-28)

16267 The west is the orientation of the mythical countries in traditional stories, as
 16268 in (64). This use probably reflects the geographical location of India as in (65).

- 16269 (64) *andi smynmimitobkucana cuu-nysdan-a* *ra* *tce,*
 16270 west ANTHR TRAL-invite:FACT-1SG be.needed:FACT LNK
jui-ce-a *tce, ky-ye-a* *tce a-pur-nyu*
 16271 IPFV:WEST-go-1SG LNK AOR:EAST-come[II]-1SG LNK IRR-IPFV-be
 16272 'I am going to the west to invite Smanmi Metog Koshana (to our realm),
 let us do (the wedding) when I come (back).' (smAnmi 2003, 36)

- 16273 (65) *nui rjykyr jui-ce* *kui-ra,*
 16274 DEM India IPFV:WEST-go SBJ:PCP-be.needed
 'That (daughter) has to go to India.' (Gesar, 13)

16275 The EASTWARDS orientation is selected to refer to Hor (Mongolia) in the Japhug
 16276 version of Gesar, as in (66).

- 16277 (66) *nui χwyr ku-ce* *kui-ra* *cti,*
 16278 DEM TOPO IPFV:EAST-go SBJ:PCP-be.needed be.AFF:FACT
 'That (daughter) has to go to Hor.' (Gesar, 12)

16279 There is one case in which the solar dimension preverbs are selected to encode
 16280 the axis that is perpendicular to the river: to refer to motion toward the opposite
 16281 bank of the river at the same altitude level (by walking on a bridge, by boat or
 16282 wading), the EASTWARDS and WESTWARDS preverbs are selected, as in (67) and
 16283 (68). In this context, both orientations are appropriate, and there is no strict rule
 16284 to choose EASTWARDS or WESTWARDS to cross a river, unless the river is oriented
 16285 north-south and the axis perpendicular to it corresponds to the east-west axis.

- 16286 (67) *qapri nuu kuu kuu-cʰu pʰyri li*
 snake DEM ERG east-APPROX.LOC opposite.bank again
 16287 *ký-wy-tcyt nuu-ŋu*
 AOR:EAST-INV-take.out SENS-be
 16288 ‘The snake took him to the opposite bank.’ (divination 2005, 50)

- 16289 (68) *kuu-cʰu pʰyri nutcu u-wa*
 east-APPROX.LOC opposite.bank DEM.LOC 3SG.POSS-father
 16290 *ko-tsum tce,*
 IFR:EAST-take.away LNK
 16291 ‘He took his father to the opposite bank of the river.’ (2011-05-nyima, 43)

16292 The EASTWARDS and WESTWARDS preverbs have many other extended uses, in
 16293 particular to express centripetal/centrifugal directions (§15.1.4.3) and meanings
 16294 further derived from them (§15.1.5.7, §15.1.5.10, §15.1.4.1). In addition, the Sensory
 16295 *nuu-* (§21.3.2.1) and Egophoric Present *ku-* (§21.3.3.1) prefixes originate from the
 16296 B-type WESTWARDS and EASTWARDS preverbs, respectively.

16297 15.1.3.4 Deadverbial verbs of relative location

16298 Deadverbial verbs of relative location express the position of the subject (in com-
 16299 parison to that of other referents) on one of the three dimensions. These verbs are
 16300 built by adding the prefix *maj-* to the adverbial stems, as indicated in Table 15.6,
 16301 and their stems are homophonous with the corresponding nouns of relative lo-
 16302 cation (§5.7.2).

16303 The *maj-* prefix has a function that is similar to that of the denominal *mr-*
 16304 prefix, which derives verbs of relative location from relator nouns (§20.6).

16305 Each of the six verbs in Table 15.6 selects the orientation preverbs correspon-
 16306 ding to their own orientation, for instance *majlo* ‘be upstream’ can only select
 16307 the UPSTREAM orientation, as in shown by (69) and (70). They are not compat-
 16308 ible with the indefinite orientation preverbs, and should not be confused with
 16309 orientable (§15.1.2) and orienting (§15.1.2.4) verbs.

Table 15.6: Verbs of relative location and corresponding locative adverbs

Locative adverb	Verb of location
<i>taš</i>	<i>maŋtaš</i> ‘be on the upper side’
<i>pa</i>	<i>maŋpa</i> ‘be on the lower side’
<i>lo</i>	<i>maŋlo</i> ‘be upstream’
<i>tʰi</i>	<i>maŋtʰi</i> ‘be downstream’
<i>kuu</i>	<i>maŋkuu</i> ‘be in the east side’
<i>ndi</i>	<i>maŋndi</i> ‘be in the west side’

- 16310 (69) *nua-<beifen>* *kua-mbro* *nura*
 3PL.POSS-seniority SBJ:PCP-be.high DEM.PL
 16311 *lu-maŋlo-nuš*,
 IPFV:UPSTREAM-be.upstream-PL
 16312 ‘The elders (sit) higher (upstream).’ (31-khAjmu, 61)
- 16313 (70) *tce nunaš txa-ftsa* *nua txa-rpuš* *syz*
 LNK DEM INDEF.POSS-ZS DEM INDEF.POSS-MB COMP
 16314 *lu-kua-maŋlo* *mu-pjy-ŋgryl*
 IPFV-GENR:S/O-be.upstream NEG-IFR.IPFV-be.usually.the.case
 16315 ‘Nephews could not be seated higher (upstream) than their maternal
 16316 uncles.’ (08-saCW, 12)
- 16317 These verbs are however compatible with tenses where the orientation pre-
 16318 verbs are neutralized, such as the Sensory *nua-* as in (71).
- 16319 (71) *nŋzo nua-tua-maŋlo* *cti* *ma azo nua-maŋtʰi-a*
 2SG SENS-2-be.upstream be.AFF:FACT LNK 1SG SENS-be.downstream-1SG
 16320 *cti* *tce*,
 be.AFF:FACT LNK
 16321 ‘You are upstream and I am downstream.’ (2014, lang he yang-zh, 20-211)
- 16322 Deadverbal verbs of relative location are either used in comparative sentences
 16323 (70), in superlative constructions with *stu* ‘most’ (§26.4.1), with contrasting ori-
 16324 entations such as (71) or in sentences with an implicit comparison such as (69).

16325 **15.1.4 Extended uses of orientations**

16326 **15.1.4.1 Time**

16327 The flow of time can be expressed in Japhug using the vertical dimension, in
 16328 particular to refer to a following period, as shown by the verb *pui-ari* in (72),
 16329 which is translated as 到了他们的下一代 <dào le tāmen de xiàyídài> ‘in the
 16330 following generation’ by Tshendzin in this context (see §27.2.4 concerning this
 16331 aspect of the kinship system).

16332 (72) *nua u-pa pui-ari tce tce, a-wymuu*
 DEM 3SG.POSS-down AOR:DOWN-go[II] LNK LNK 1SG.POSS-brother

16333 *u-ye pui-nua-ŋu, a-sq^haj yuu*
 3SG.POSS-grandchild PST.IPFV-AUTO-be 1SG.POSS-sister GEN

16334 *u-ye pui-nua-ŋu tce azo tyrcurca*
 3SG.POSS-grandchild PST.IPFV-AUTO-be LNK 1SG together

16335 *“a-ye” tu-ti-a cti.*

16336 1SG.POSS-grandchild IPFV-say-1SG be.AFF:FACT

16337 ‘In the (generation) below (that of one’s nephews), I say *a-ye* ‘my
 16338 grandchild’ (to all grandnephews), whether they are my brother’s
 grandchildren or my sister’s grandchildren.’ (140425 kWmdza02, 16)

16339 However, motion verbs in collocations with temporal nouns in the sense of
 16340 ‘pass (of time)’ select the orientation WESTWARDS, as in (73) and (74). This use
 16341 could also be a metaphorical extension of the apparent westward motion of the
 16342 sun in the sky during day time (§15.1.3.3), or derived from the centrifugal function
 16343 of the ‘westward’ orientation (§15.1.4.3).

16344 (73) *tce u-tuu-sy-scit kuu nua ty-rzax*
 LNK 3SG.POSS-NMLZ:DEG-PROP-be.happy ERG DEM INDEF.POSS-time

16345 *nua-ari muu-pjx-tso.*

AOR:WEST-go[II] NEG-IFR-understand

16346 ‘It was so nice there that he did not realize that (a lot of) time had passed.’
 16347 (28-smAnmi, 290)

16348 (74) *kyntc^hu-sla jny-cq^hlyt ri*
 several-months IFR:WEST-disappear LNK

16349 ‘Several months passed.’ (140513 mutong de disheng-zh, 13)

16350 The semi-transitive verbs *mda* ‘arrive (of time)’ and *tsu* ‘pass (of time)’ however
 16351 generally select the orientation UPWARDS (see 115 and 116 in §7.5.1), though the

16352 unspecified orientation is also attested for the latter, as in (75). The verb *mdu*
 16353 ‘live up to’ is used with the DOWNSTREAM orientation preverbs (see 87 and 88,
 16354 §19.7.2).

- 16355 (75) *χsui-xpa jy-tsu-j,*
 three-year AOR:UNSPECIFIED-pass-1SG
 16356 ‘We have been (together) for three years (now), and ...’ (Norbzang 2005,
 16357 59)

16358 For these semi-transitive verbs, the noun phrase referring to a time period is
 16359 the semi-object, not the subject.

15.1.4.2 Illative / elative

16361 A common extended function of the riverine dimension preverbs is to express motion
 16362 through an opening. The UPSTREAM preverbs can have an illative meaning,
 16363 describing motion into a building or a natural cave (through a door, a window
 16364 or any other opening) as in (76), (77) and (78).

- 16365 (76) *praskʰaj ui-ŋgut nutcu lo-ce pui-ŋu tceri*
 cave 3SG.POSS-in DEM:LOC IFR:UPSTREAM-go SENS-be LNK
 16366 ‘He went into the cave.’ (140425 shizi huli he lu-zh, 47)
- 16367 (77) *kʰa ui-ŋgut ly-yi-ndzi tce,*
 house 3SG.POSS-in IMP:UPSTREAM-come-DU LNK
 16368 ‘Come inside the house.’ (140507 tangguowu-zh, 90)

16369 The combination of the UPSTREAM orientation with *stʰor* ‘push’ in (78) means
 16370 ‘push (the door) towards the inside of the house’.

- 16371 (78) *spjan̥kui nu kui kum lo-stʰor tce, ui-ŋgut*
 wolf DEM ERG door IFR:UPSTREAM-push LNK 3SG.POSS-in
 16372 *lo-ce.*
 IFR:UPSTREAM-go
 16373 ‘The wolf pushed the door and went in.’ (140428 xiaohongmao-zh, 80)

16374 The opposite DOWNSTREAM orientation preverbs have an elative meaning, ex-
 16375 pressing motion out of a building, as in (79).

- 16376 (79) *kʰa ui-pci cʰy-łor.*
 house 3SG.POSS-outside IFR:DOWNSTREAM-come.out
 16377 ‘She came out of the house.’ (140428 xiaohongmao-zh, 28)

15 Orientation and associated motion

However, in the case of tubular or pipe-like objects like the trunk of a musket, the orientation is the opposite: the DOWNSTREAM preverbs are used for motion toward the inside (80), and the UPSTREAM preverbs occur for motion towards the outside (81).

- (80) *cymuiyduu u-lycu u-mŋu ri qandži*
 musket 3SG.POSS-upstream 3SG.POSS-opening LOC bullet
 c^h *u-rku-nu*

IPFV:DOWNTREAM-put.in-PL

‘The load the bullet into the (trunk) of the musket from the opening (the muzzle)’ (28-CAmWGdW, 38)

- (81) *nunuu muizi nuu tu-nuat tce tce qandži nuu*
 DEM gunpowder DEM IPFV-burn LNK LNK bullet DEM
 $lu\text{-}βde$ *tce ju-ce* *juu-ŋu*

IPFV:UPSTREAM-throw LNK IPFV:UNSPECIFIED-go SENS-be

‘The gunpowder flares and drives the bullet out (of the trunk of the muzzle).’ (28-CAmWGdW, 85-86)

Likewise, the UPSTREAM preverbs occur to express motion out of a sheath, as in (82).

- (82) *scapa lo-χcosk*

sword IFR:UPSTREAM-take.out

‘He unsheathed his sword.’ (140514 huishuohua de niao-zh, 178)

The same applies with containers having a small (and tubular) opening, like bags or bottles for instance. The DOWNSTREAM orientation preverbs have the illative meaning ‘go/put into’ and the UPSTREAM preverbs the elative meaning ‘come out of/take out of’ as illustrated by (83) and (84). By extension, the verb *yrmut* ‘blow’ (for instance, into a pipe) also selects the DOWNSTREAM preverbs (§15.1.5.8).

- (83) *tcendyre “ty-fkum u-ŋgwu tce t^hu-ce*
 LNK INDEF.POSS-bag 3SG.POSS-in LOC IMP:DOWNTREAM-go
 $nuu\text{-}nts^hi$ *wo*” *to-ti.* *tcendyre <dongguoxiansheng> nuu kuu*
 SENS-be.better SFP IFR-say LNK ANTHR DEM ERG
 icq^ha *ty-fkum* *u-ŋgwu* *juyi nuura tsuku*
 the.aforementioned INDEF.POSS-bag 3SG.POSS-in book DEM:PL some

- 16403 *lo-tcxt,* [...] *spjanjkua nuu nuu u-ŋguu*
 IFR:UPSTREAM-take.out wolf DEM DEM 3SG.POSS-in
 16404 *cʰy-rku.*
 IFR:DOWNSTREAM-put.in
 16405 ‘Mr. Dongguo said: ‘Why don’t you go into the bag (to hide)’, took out
 16406 some of the books from the bag, and put the wolf into it.’ (150901
 16407 dongguo xiansheng he lang-zh, 48)

- 16408 (84) <*suoluomen*> *nuu kui azo kuiki pʰoy u-ŋguu tce*
 ANTHR DEM ERG 1SG DEM.PROX bottle 3SG.POSS-in LOC
 16409 *tʰú-wy-rku-a* *ŋu,*
 AOR:DOWNSTREAM-INV-put.in-1SG be:FACT
 16410 ‘Solomon put me in this bottle.’ (140512 yufu yu mogui-zh, 78)

16411 In the case of boxes with large openings on the top, the riverine orientation
 16412 preverbs are not used, and the vertical dimensions preverbs occur instead: the
 16413 DOWNWARDS preverbs express motion into the box, as in (85), and the UPWARDS
 16414 preverbs motion out of it, as shown by example (86).

- 16415 (85) *mar-rgym u-ŋguu zuu χwyr ra yuu nuu-rjyβlun thamtctxt yuu*
 butter-box 3SG.POSS-in LOC TOPO PL GEN 3PL.POSS-ministers ALL GEN
 16416 *nuu-ku nuu pjy-rku*
 3PL.POSS-head DEM TRAL-IFR:DOWN-put.in
 16417 ‘He had put the heads of all the ministers of Hor in a butter box.’ (gesar,
 16418 373)

- 16419 (86) *u-sloχpuun nuu kui rgym u-ŋguu zuu, nykinuu, χcylmdoy ci*
 3SG.POSS-teacher DEM ERG box 3SG.POSS-in LOC FILLER spyglass INDEF
 16420 *to-tctxt tce ny-mbi*
 IFR:UP-take.out LNK IFR-give
 16421 ‘His teacher took a spyglass from a box and gave it to him.’ (140508
 16422 benling gaoqiang de si xiongdi-zh, 73)

16423 The WESTWARDS preverbs are selected in the case of an object passing through
 16424 a hole with openings on both sides, for instance a needle’s eye, as in (87).

- 16425 (87) *taqaβ nuu u-rna ri spos tce, tce nutcu*
 needle DEM 3SG.POSS-ear LOC have.a.hole:FACT LNK LNK DEM:LOC

15 Orientation and associated motion

- 16426 *tʂ-ri* *pńá-wy-rbe*,
INDEF.POSS-thread IPFV:WEST-INV-pass.through
16427 ‘The needle has a hole at the (needle’s) eye_i, and one passes the thread
16428 through it_i.’ (12-kAtsxWb, 33-34)
- 16429 The orientation EASTWARDS can be used for motion into a small cavity whose
16430 opening is as large as the inside and is located on the side, as shown by examples
16431 (88) and (89).
- 16432 (88) *nunja u-ndzi* *t^hu-kʂ-rvydut* *u-ŋgu* *nautcu*
cow 3SG.POSS-skin IPFV-OBJ:PCP-distend 3SG.POSS-in DEM:LOC
16433 *ko-ce*.
IFR:EAST-go
16434 ‘He went into the distended hide of the cow.’ (31-deluge, 25)
- 16435 (89) *nua yua u-rna* *u-ŋgu* *xcelwi ko-ce* *pua-ŋu*
DEM GEN 3SG.POSS-ear 3SG.POSS-in tick IFR:EAST-go SENS-be
16436 ‘A tick went into his ear.’ (kAndZislama 2003, 115)
- 16437 The EASTWARDS orientation also occurs for piercing motion into a surface (like
16438 skin), as in (90) (see also 125, §17.5.4).
- 16439 (90) *tua-ca* *u-ŋgu* *kʂ-ari* *q^he, konla*
INDEF.POSS-flesh 3SG.POSS-in AOR:EAST-go[II] LNK completely
16440 *u-ŋgu* *zo* *ku-ce* *cti*.
3SG.POSS-in EMPH IPFV:EAST-go be.AFF:FACT
16441 ‘When (its thorn) goes into the flesh, it penetrates completely.’ (17-xCAj,
16442 69)
- 16443 The data above show that no orientation preverb intrinsically encodes illative
16444 or elative meaning in Japhug. The interpretations ‘towards the inside’ or ‘towards
16445 the outside’ depend on the shape of the object and the location and the relative
16446 size of the opening.
- 16447 **15.1.4.3 Centripetal / centrifugal**
- 16448 In Gyalrong languages, the WESTWARDS and EASTWARDS preverbs in some cases
16449 express centrifugal vs. centripetal directions, respectively. This phenomenon was
16450 first noticed in Situ by Lin (1993: 228–229).

16451 Example (91)¹⁰ illustrates this extension of the solar dimension with the verb
 16452 *ct^huz* ‘turn towards’ (§15.1.2.4): the orientation towards the subject of the verb
 16453 (centripetal) is expressed by the EASTWARDS preverb (*ko-ct^huz*), and the opposite
 16454 orientation away from the subject (centrifugal) is encoded by the WESTWARDS
 16455 preverb (*ny-ct^huz*).

- 16456 (91) *tce w-rme nuu w-pci ny-ct^huz,*
 LNK 3SG.POSS-hair DEM 3SG.POSS-outside IFR:WEST-turn.towards
 16457 *w-ndzi nuu w-ŋgw ko-ct^huz tce tce to-ŋga.*
 3SG.POSS-skin DEM 3SG.POSS-in IFR:EAST-turn.towards LNK LNK IFR-wear
 16458 ‘He turned the fur (of the jacket); towards the outside, and the leather
 16459 towards the inside and wore it.’ (140513 mutong de disheng-zh, 55)

16460 The centrifugal use of the WESTWARDS preverbs has been further lexicalized
 16461 and extended to verbs expressing loss or transfer of property (§15.1.5.7, §15.1.5.10)
 16462 and passing of time (§15.1.4.1).

16463 The centripetal use of the EASTWARDS preverbs also accounts for the presence
 16464 of the EASTWARDS preverbs with verbs meaning ‘close’, ‘wrap up’ or ‘fold’. Com-
 16465 pare for instance the EASTWARDS preverb on *wum* ‘gather’ (in the meaning ‘fold
 16466 wings’) with the WESTWARDS one on *qyt* ‘separate’ in (92).

- 16467 (92) *tx-mbri w-k^huk^ha w-bar nuu kura ntsu*
 AOR-make.noise 3SG.POSS-while 3SG.POSS-wing DEM DEM.PROX:PL always
 16468 *tu-ste nyu ma juu-kui-nuqambumbjom*
 IPFV-do.like[III] be:FACT LNK PROXM-SBJ:PCP-fly
 16469 *tx-kui-ryngat nuu kui-fse, w-bar nyu*
 IPFV-SBJ:PCP-prepare DEM SBJ:PCP-be.like 3SG.POSS-wing DEM
 16470 *nuu-qyt ny ku-wum [...] nyu*
 IPFV:WEST-separate ADD IPFV:EAST-gather be:FACT
 16471 ‘When it sings, it does like that with its wings, like it is about to fly, it
 16472 (repeatedly) spreads its wings and then folds them.’ (24-ZmbrWpGa,
 16473 120-123)

16474 A separate use of the solar dimension preverbs is to express alternation be-
 16475 tween left and right motion, with two verbs either linked by *ny* as in (95) or in
 16476 paratactic relation as in (93) and (94). In this function, the EASTWARDS preverbs
 16477 occur on the first verb and the WESTWARDS preverbs on the second one.

¹⁰This example is very freely translated from把羊毛朝外面翻出来 <bǎ yángmáo cháo wàimiàn fānchūlái> ‘he turned over the jacket so that the sheep fur was on the outside’. Given the distance from the original, there is no suspicion of calque from Chinese here.

15 Orientation and associated motion

- 16478 (93) *pjy-yryt tce u-rfit ra kuu ko-ryci-nuu*
IFR:DOWN-throw LNK 3SG.POSS-offspring PL ERG IFR:EAST-pull
16479 *jy-ryci-nuu zo juu-ju*
IFR:WEST-pull-PL EMPH SENS-be
16480 ‘She threw them_i down (there), and her children tore them_i apart (pulled
16481 them_i right and left in a disorderly way).’ (2012 Norbzang, 401)
- 16482 (94) *lualu nuu kuu ci ko-mja, ci no-mja tce*
cat DEM ERG one IFR:EAST-grab one IFR:WEST-grab LNK
16483 ‘The cat grabbed one on his left and one on his right.’ (IWlu 2002, 78)

16484 With the deictic motion verbs, the EASTWARDS-WESTWARDS alternation also
16485 occurs between *ce* ‘go’ and *yi* ‘come’ as shown by (95). Since in this construction
16486 the motion verb with translocative deixis always takes the EASTWARDS preverbs,
16487 while the one with cislocative deixis is found with the WESTWARDS preverbs, it
16488 is not possible to argue that these preverbs here have centripetal vs. centrifugal
16489 functions as in this case the deixis of the preverbs would contradict that of the
16490 motion verb.

- 16491 (95) *jiga ki kuu-fse ku-ce ny juu-yi,*
zigzag DEM SBJ:PCP-be.like IPFV:EAST-go ADD IPFV:WEST-come
16492 *ku-ce ny juu-yi,*
IPFV:EAST-go ADD IPFV:WEST-come
16493 ‘The zigzags go left and right.’ (140522 Kamnyu zgo, 39)

15.1.4.4 Orientations in traditional houses

16494 In the traditional living room (*kʰyjmu*), the seating places around the hearth and
16495 the tripod (*sqʰi*) have specific names and functions: *kʰyckʰyr* for the men, *kʰydi*
16496 for the lady (in charge of preparing the meal), *caylo* for elderly ladies¹¹ and *saydi*
16497 for servants and for putting firewood. The use of the riverine and solar dimen-
16498 sion preverbs, adverbs and locative nouns in the living room is unrelated to the
16499 cardinal east-west axis or the direction of the mountain slope, and is rather com-
16500 pletely determined by these conventional seating places, as explained in (96), and
16501 summarized in Figure 15.1.

¹¹This noun is related to the egressive postposition *caylo* ‘upstream from’ (§8.2.10).

- 16503 (96) *k^hydi* *nunu tce at^hi* *tu-ti-nuu.*
lady.seating.place DEM LNK downstream IPFV-say-PL
- 16504 *caylo* *nuu tce alo* *tu-ti-nuu,* *k^hyck^hyr*
elder.lady.seating.place DEM LNK upstream IPFV-say-PL man.seating.place
- 16505 *nuu tce kutcu pcov puu-nuu-ηu,* *kutcu pcov puu-nuu-ηu,*
DEM LNK here side PST.IPFV-AUTO-be here side PST.IPFV-AUTO-be
- 16506 *tcekui* *tu-ti-nuu.* *tce “n^hzo tcekui ky-nuu-ce”* *nura*
eastwards IPFV-say-PL LNK 1SG eastwards IMP:EAST-AUTO-go DEM:PL
- 16507 *tu-ti-nuu.*
IPFV-say-PL
- 16508 'For the seating of the ladies, they say DOWNSTREAM, for that of the elder
16509 ladies they say UPSTREAM, for that of the men, whether it is here or here,
16510 they say EASTWARDS, they say 'go over there EASTWARDS'. (31-khAjmu,
16511 55-59)

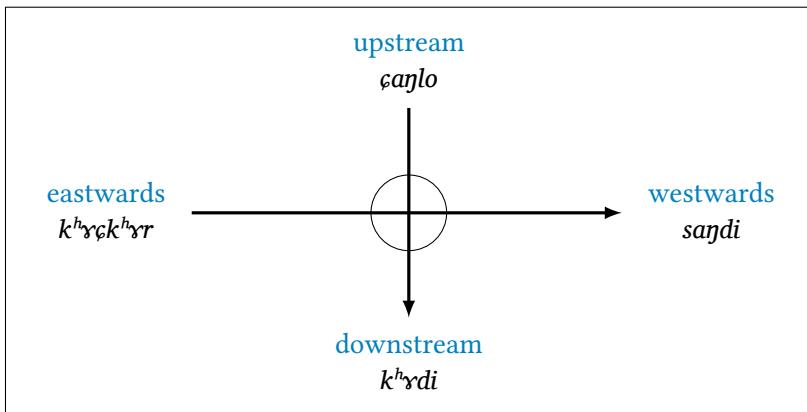


Figure 15.1: Orientations in the living room

16512 The preverbs corresponding to the orientation indicated in Figure 15.1 are al-
16513 ways selected when the goal of the motion is one of the seating places in the
16514 living room, for instance EASTWARDS in (97) or WESTWARDS in (98).

- 16515 (97) *tx-tciu* *nuu puu-nuu-xtci-nuu* *puu-nuu-wxti-nuu*
INDEF.POSS-SON DEM PST.IPFV-AUTO-be.small-PL PST.IPFV-AUTO-be.big-PL
- 16516 *tce k^hyck^hyr* *tci ku-ce-nuu.*
LNK men.seating.place LOC IPFV:EAST-go-PL
- 16517 'Men, whether they are young or older, go to the men's EASTWARDS
16518 seating place.' (31-khAjmu, 30)

15 Orientation and associated motion

- 16519 (98) *sandi nutcu si nui-ta-nui*
 seating.place DEM:LOC WOOD IPFV:WEST-put-PL
 16520 'They put the firewood on the WESTWARDS seating place (that is opposite
 16521 the men's EASTWARDS seating place)' (31-khAjmu, 36)

15.1.4.5 Orientations with the weaving loom

16523 The riverine dimension is metaphorically extended to refer to the axis of the
16524 warp threads in the loom. The DOWNSTREAM orientation corresponds to the end
16525 of the warp closer to the weaver (where Tshendzin's hands are located in Fig-
16526 ure 15.2), and the UPSTREAM orientation to the opposite end, where the threads
16527 are attached.



Figure 15.2: The riverine axis in a body tensioned loom

The downstream preverbs are required on all verbs expressing motion towards the lower side, for instance to express the tamping of the intersections between the threads (using the tool called *t^has̥mu*, which is located between upper and lower warp threads to maintain them apart from each other in Figure 15.2) towards the waist of the weaver, as in (99).

- 16533 (99) *wu-sqar* *nwu t^bwu-ari* *tce*
 3SG.POSS-intersection.of.warp.threads DEM AOR:DOWNSTREAM-go[II] LNK
 16534 *tce, nyki, kuaki* *tú-wy-stu* *tce c^hú-wy-ynda.*
 LNK FILLER DEM.PROX IPFV-INV-do.like LNK IPFV:DOWNSTREAM-INV-tamp
 16535 ‘As the intersection of the (upper and lower) warp threads goes down,
 16536 one does like that to tamp it down.’ (vid-20140429090403, 62)

16537 The axis that is perpendicular to that of the warp threads and parallel to the
 16538 ground, through which the weft is inserted (the action depicted in Figure 15.2), is
 16539 described using the solar dimension, as shown by the selection of the WESTWARDS
 16540 preverb in (100).

- 16541 (100) *wi-tas cʰo wi-pa yuu wi-ujar ni*
 3SG.POSS-top COMIT 3SG.POSS-bottom GEN 3SG.POSS-warp DU
 16542 *pjui-rqytsʰa-ndzi, nautcu tur-jlyβ júi-wy-rbe tce*
 IPFV-be.crossed-DU DEM.LOC INDEF.POSS-weft IPFV:WEST-INV-insert LNK
 16543 ‘The upper and lower warp threads are crossed, and at (the crossing
 16544 place) one inserts the weft.’ (additional explanation provided while
 16545 transcribing the video from which Figure 15.2 is taken).

16546 The vertical dimension preverbs refer to the third axis that is perpendicular
 16547 with the two previous ones, with the DOWNTOWARDS orientation towards the
 16548 ground. The UPWARDS preverbs occur to describe the lifting of the warp threads
 16549 using the heddles, as in (101).

- 16550 (101) *cnat kuu ty-ri ra tce nua kuu tú-wy-sui-job*
 heddle ERG INDEF.POSS-thread PL LNK DEM ERG IPFV:UP-INV-CAUS-raise
 16551 *tce,*
 LNK
 16552 ‘One lifts the (warp) threads with the heddles.’ (2011-06-thaXtsa)

15.1.5 Lexicalized orientations

16553 A complete description of the lexicalized orientation preverbs in Japhug would
 16554 require a monograph-length treatment taking into account all verbs, basic and
 16555 derived, and including complex predicates. In order to keep this chapter within
 16556 a reasonable size, I therefore only focus on a few selected semantic categories
 16557 comprising the most common non-orientable verbs of the language.

15.1.5.1 Spatial use of preverbs with non-orientable verbs

16558 While non-orientable verbs generally select only one or two orientations (§15.1.5),
 16559 orientation preverbs that are different from the lexical ones can occur in specific
 16560 contexts to indicate either a motion event linked with the action of the verb
 16561 (normally with an additional associated motion prefix, §15.2.4), the motion of a
 16562 body part or the position of the body.

16565 The intransitive verb *cui* ‘hibernate’ provides an interesting example of this
 16566 use of the preverbs. The lexically selected orientation of this verb is EASTWARDS
 16567 (like other verbs from the same semantic category), as shown by the preverb *ku-*
 16568 in (102).

- 16569 (102) *qartsuu tce ku-cui* *nua-ŋu.*
 winter LOC IPFV-hibernate SENS-be
 16570 ‘In winter, (the bear) hibernates.’ (21-pri, 51)

16571 However, the orientations UPSTREAM and UPWARDS are also attested with this
 16572 verb, with more specific readings. The UPSTREAM orientation is found in (103) and
 16573 also in (170) above, §15.2.1, and expresses hibernation in a cave. These examples
 16574 reflect the illative use of the UPSTREAM preverbs (§15.1.4.2). The UPWARDS orien-
 16575 tation, also shown by (103), is used when hibernation takes place in a hollow tree,
 16576 with vertical motion up the tree (§15.1.3.1).

- 16577 (103) *tce qartsuu tce numuu si kʰonyryl tx-kui-yri* *nua*
 LNK winter LOC DEM wood hollow.tree AOR:UP-SBJ:PCP-go[II] DEM
 16578 *u-ŋgaa* *numaa* *tu-cui,* *numaaŋaa, pravra u-ŋgaa*
 3SG.POSS-in otherwise IPFV:UP-hibernate otherwise cave 3SG.POSS-in
 16579 *lu-ce* *tce lu-cui.*
 IPFV:UPSTREAM-go LNK IPFV:UPSTREAM-hibernate
 16580 ‘In winter, it either hibernates in a hollow tree, or goes into a cave and
 16581 hibernates (there).’ (21-pri, 107-108)

16582 The forms with UPSTREAM and UPWARDS preverbs often occur with either mo-
 16583 tion verbs or associated motion prefixes, as in (104).

- 16584 (104) *si u-ŋgaa tx-kui-so,* *u-ŋgaa*
 wood 3SG.POSS-in IPFV:UP-SBJ:PCP-be.hollow 3SG.POSS-in
 16585 *tx-kui-rom,* *nanaa pjui-saxsi* *tce, nua*
 IPFV:UP-SBJ:PCP-be.dried DEM IPFV-do.completely LNK DEM
 16586 *u-ŋgaa c-tu-cui* *nua-ŋu.*
 3SG.POSS-in TRAL-IPFV:UP-hibernate SENS-be
 16587 ‘Trees whose inside is hollow, whose inside is dried, (the bear) (hollows)
 16588 it completely, goes up (the hole) and hibernates (there).’ (21-pri, 55)

16589 The use of preverbs to express spatial position or motion as in the case of the
 16590 UPSTREAM and UPWARDS orientations with *cui* ‘hibernate’ above are not unusual
 16591 with non-orientable verbs, but are lexicalized, and restricted to highly specific

and well-identified situations. Only orientations that are pragmatically and culturally plausible and compatible with the speaker's knowledge of the world can be used: with *cuu* 'hibernate' for instance, the other series of orientation preverbs (DOWNWARDS, DOWNSTREAM, WESTWARDS) are not attested. It is not possible to predict which non-orientable verb will be compatible with the spatial use of preverbs, and this information has to be specified in dictionaries in a systematic way. The following sections (§15.1.5.4 to §15.1.5.11) present a series of examples of similar phenomena.

15.1.5.2 Preverbs and lability

A handful of labile verbs select different preverbs and have slightly different meanings in their transitive and intransitive/semi-transitive uses.

The verb *szyo* 'listen' takes the WESTWARDS preverbs when semi-transitive, and the EASTWARDS preverbs when transitive with the meaning 'listen to, obey' (§14.5.3).

The verb *suso* 'think' is normally transitive and selects the WESTWARDS preverbs. It can also occur with the DOWNWARDS preverbs, but in this case it is intransitive, and means 'in X's opinion' (§14.5.1).

15.1.5.3 Irregular orientations with local toponyms

Motion from one locality to another is nearly always expressed using the vertical, riverine and solar dimensions in their basic spatial functions (§15.1.3.1, §15.1.3.2 and §15.1.3.3, respectively). While in some cases there are conflicts between several possible orientations, especially between the riverine and the solar preverbs, the choice of the preverbs is nearly always motivated.

However, there are also cases where the choice of the preverbs is unrelated to the actual spatial orientation of the trip from one particular place to another. For instance, Kamnyu *krympuu* (32°12'N,101°57'E) is located to the west of Mengi *muŋji* (32°11'N,101°57'E, 蒙岩). However, the preverbs corresponding to orientations that are exactly opposite to the geographical orientations are used between these two villages: the orientation WESTWARDS is used for motion from Kamnyu to Mengi (to describe a trip from west to east), and EASTWARDS from Mengi to Kamnyu (whereas the actual trip is from east to west), as shown by (105) and (106).

- 16624 (105) *krympuu tce tce muŋji kx-ce tx-ra tce, "muŋji*
 TOPO LOC LNK TOPO INF-go AOR-be.needed LNK TOPO

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- 16625 *nui-ce-a*" *tu-kui-ti* *ŋu.* *tce muŋi tce kymjuu*
 IPFV:WEST-go-1SG IPFV-GENR:S/O-say be:FACT LNK TOPO LOC TOPO
- 16626 *nui tce tce, n̩ki,* " *kymjuu ky-ye-a,* *kymjuu*
 DEM LNK LNK FILLER TOPO AOR:EAST-come[II]-1SG pl.n
- 16627 *ku-ce-a* *ŋu"* *nura tu-ti-nui.*
 IPFV:EAST-go-1SG be:FACT DEM:PL IPFV-say-PL
- 16628 'When one has to go from Kamnyu to Mengi, one says 'I am going
 16629 (westwards) to Mengi, and from Mengi to Kamnyu, people say 'I came
 16630 (eastwards) to Kamnyu, I am going (eastwards) to Kamnyu.' (150904
 16631 akW andi, 6)
- 16632 (106) *muŋi nui-syx-ce* *t̩su nūnūre ri,*
 TOPO IPFV:WEST-OBL:PCP-go path DEM:LOC LOC
 16633 'On the road (from Kamnyu) towards Mengi...' (140522 Kamnyu zgo, 2)

16634 This contradiction is clear in example (107), where Mengi is explicitly described
 16635 as being located on the *akui* (east) side of Kamnyu.

- 16636 (107) *akui pcov nui muŋi ŋu,* *andi pcov praqwu ŋu.*
 east side DEM TOPO be:FACT west side TOPO be:FACT
 16637 'Mengi is on the east, and Praqwu (a small locality in Kamnyu) is on the
 16638 west.' (140522 Kamnyu zgo, 21)

16639 Ercha village (in Japhug *yʃu tsʰapa*, most often called using its Chinese name
 16640 二茶村 *èrchácūn*, 32°13'N, 101°55'E), located to the west of Kamnyu, also presents
 16641 orientation inversion: as shown by (108), the EASTWARDS preverbs are used for
 16642 trips from Kamnyu to Ercha, and the WESTWARDS preverbs for the opposite trip.
 16643 This fact has been reverified with several speakers (note in particular the anecdote reported in §27.5.2).

16645 Note that the presence of a hesitation: Tshendzin was about to say *nui-kui-ce*
 16646 with a WESTWARDS preverb (the expected form, based on the geographical loca-
 16647 tion of these localities), followed by the the correct *ku-kui-ce* with the irregular
 16648 orientation.

- 16649 (108) *tce kymjuu tce tce <erchacun> nui-kui... ku-kui-ce* *tce*
 LNK TOPO LOC LNK TOPO IPFV:EAST-GENR:S/O-go LNK
 16650 *tce, nūnū "ku-ce-a"* *tu-kui-ti* *ŋu.* *<erchacun>*
 LNK DEM IPFV:EAST-go-1SG IPFV-GENR:S/O-say be:FACT TOPO
 16651 *tce kymjuu a-nui-yi-nui* *tce nui 'kymjuu*
 LOC TOPO IRR-PFV:WEST-come-PL LNK DEM TOPO

16652	<i>nur-ari-a</i>	<i>kympuu nur-ye-a”</i>	<i>nura</i>
	AOR:WEST-go[II]-1SG TOPO	AOR:WEST-come[II]-1SG DEM:PL	
16653	<i>tu-ti-nuu</i>	<i>ŋu.</i>	
	IPFV-say-PL	be:FACT	
16654	(150904 akW andi, 10-11)		

16655 This puzzling irregularity has not been observed for other toponyms, espe-
 16656 cially those located further away from Kamnyu. For instance, the UPSTREAM ori-
 16657 entation is used for trips to Tshobdun and Zbu, the DOWNSTREAM orientation
 16658 to Mbarkham (§15.1.3.2) and the EASTWARDS orientation to Sarndzu and Tatshi
 16659 (§15.1.3.3).

15.1.5.4 Verbs of ingestion

16660 The most common verb of ingestion, *ndza* ‘eat’, generally selects the UPWARDS
 16661 preverbs, as shown for instance by (206) (in §15.2.7) and (200) (in §15.2.6). The
 16662 same is true of verbs derived from it, such as the compound verb *rundzvts’hi*
 16663 ‘have a meal’ (§20.12), as shown by (204) in §15.2.7, and of other more specialized
 16664 verbs of food ingestion such as *moꝝ* ‘eat (powdery food)’, *nutꝝhav* ‘eat fodder (of
 16665 horses)’, *nutꝝhyyndzxr* ‘eat a tsampa meal’, *zmrryβ* ‘eat (mixing with)’ or *χsrl* ‘eat
 16666 (honorific)’.

16667 The DOWNSTREAM preverbs can occur with *ndza* ‘eat’ to refer to eating by wild
 16668 beasts and birds of prey, as in (109), probably due to the fact that this orientation
 16669 is also selected by *ckut* ‘eat/drink completely’, a verb which can also describe the
 16670 actions of ferocious animals as in example (71) in §14.3.3.1.¹²

- 16671 (109) *ku*rtsy_n *nu* *kua*, *nrki*, *turme* *ra* *yui* *nui-fsapav* *nu*
 16672 leopard DEM ERG FILLER people PL GEN 3PL.POSS-animal DEM
 16673 *c^hui-ndze*, [...] *qazo* *ts^hyt* *nui*
 16674 IPFV:DOWNSTREAM-eat[III] sheep goat DEM
 16675 *c^hui-ndze* *pjx-ŋu*,
 16676 IPFV:DOWNSTREAM-eat[III] IFR.IPFV-be
 16677 ‘The snow leopard was eating domestic animals, eating, sheep and
 16678 goats.’ (qala kW CqraR 2002, 3)

16679 This orientation is also attested to describe the eating of earth by earthworm
 16680 as in (110), though in this case the preverb is used spatially (§15.1.5.1), reflecting
 16681 the burrowing motion of the earthworm (§15.1.4.2).

¹²See also the discussion on the use of the DOWNSTREAM orientation with *ts^hi* ‘drink’ below, above example 115).

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- 16680 (110) *tceri qandže kuu t^hylwa bja c^hur-ndze*
 LNK earthworm ERG earth completely IPFV:DOWNSTREAM-eat[III]
 16681 *jnu-cti.*
 SENS-be.AFF
 16682 ‘The earthworm only eats earth.’ (25-akWzgumba, 126)

16683 The EASTWARDS orientation is exclusively attested with *ndza* to describe eclipses,
 16684 as in (111), also a spatial use of the preverbs (expressing motion from the left side
 16685 to the right side or vice-versa, §15.1.4.3).

- 16686 (111) *uu-rkuu kuufse ku-ze tce,*
 3SG.POSS-side SBJ:PCP-be.like IPFV:EAST-being[III] LNK
 16687 *mua-ky-arco myctṣa ku-ndze yyzu,*
 NEG-AOR:EAST-be.finished until IPFV:EAST-eat[III] exist:SENS
 16688 ‘Sometimes (the eclipse) starts on one side, and ‘eats’ (the moon) until it
 16689 (disappears) completely.’ (29-mWBZi, 155)

16690 The orientation WESTWARDS occurs with verbs referring to animals eating
 16691 grass, such as the intransitive verb *nuruu* ‘eat grass’ as in (112) and its synonym
 16692 *nusrlxy.*

- 16693 (112) *nunja q^he qazo ts^hyt nura pjy-dyn-nuu tce, nutcu*
 cow LNK sheep goat DEM:PL IFR.IPFV-be.many-PL LNK DEM:LOC
 16694 *jnu-nuruu-nuu tce sujno tu-ndza-nuu pjy-ŋu,*
 IPFV:WEST-eat.grass-PL LNK grass IPFV:UP-eat-PL IFR.IPFV-be
 16695 ‘There were many cows, sheep and goats, and they were eating grass
 16696 there.’ (150819 woniu-zh, 9)

16697 Verbs related to the ingestion of liquids select the EASTWARDS preverbs as de-
 16698 fault, as in (113), including the deideophonic *nuk^huy* ‘gulp’ (§20.9.2).

- 16699 (113) *tui-ci ko-nuk^huy zo ko-ts^hi.*
 INDEF.POSS-water IFR:EAST-gulp EMPH IFR:EAST-drink
 16700 ‘He gulped the water.’ (140429 jiedi-zh, 70)

16701 The verb *ts^hi* ‘drink’ is also found with the DOWNWARDS orientation to refer to
 16702 drinking with the head down on the grounds (like animals, or from a jar with a
 16703 straw), for instance in (167) and (168) in §15.2.1 and (37) in §5.1.2.9. The nominal
 16704 verb *nuci* ‘drink from the ground’ also selects this orientation.

16705 The DOWNSTREAM preverbs occur with this verb in two contexts. First, following
 16706 the basic spatial meaning of these preverbs ('direction of the flow of water',
 16707 §15.1.3.2), they can be used to insist on the flow of liquid through the oesophagus
 16708 during ingestion, as in (114).

- 16709 (114) *tui-ci kumy c^hu-cə mui-jy-k^hu.*
 INDEF.POSS-water also IPFV:DOWNSTREAM-go NEG-IFR-be.possible
 16710 *tui-ci c^hu-ts^hi mui-jy-k^hu*
 INDEF.POSS-water IPFV:DOWNSTREAM-drink NEG-IFR-be.possible
 16711 'Even water could not go (down his throat), he could not drink anymore.'
 16712 '(of a person suffering from throat cancer, 27-tWfCAL, 81)

16713 Second, the DOWNSTREAM orientation is found to express excessive alcohol
 16714 drinking, as in (115), possibly by analogy with *çkut* 'eat/drink completely' which
 16715 also takes this orientation (see also the discussion concerning example 109 above).

- 16716 (115) *u-wa nui kui c^ha ntsui c^hu-ts^hi q^he,*
 3SG.POSS-father DEM ERG alcohol always IPFV:DOWNSTREAM-drink LNK
 16717 *u-me müj-nuβdaš*
 3SG.POSS-daughter NEG:SENS-take.care
 16718 'Her father was drinking alcohol all the time, and did not take care of his
 16719 daughter.' (17-lhazgron, 68)

16720 The DOWNSTREAM preverbs are also selected by the denominal verb *nuc^hymda*
 16721 'drink with a straw' (example 73, §25.1.5), probably reflecting the illative (through
 16722 tubular opening) function of the DOWNSTREAM preverb (§15.1.4.2). It is noteworthy
 16723 that *ts^hi* 'drink' takes the DOWNWARDS orientation instead when referring to
 16724 drinking from a straw.

16725 The UPSTREAM preverbs occur with the verb *χyβ*, which can mean 'drink un-
 16726 til the last drop in one gulp', or 'breathe in, suck up, draw up' as in (116), a
 16727 special case of the illative (through large opening) function of this orientation
 16728 (§15.1.4.2; note that the illative is expressed with the opposite orientation as that
 16729 of *nuc^hymda* 'drink with a straw', due to the difference of the shape of the open-
 16730 ing).

- 16731 (116) *u-sŋuro lu-χyβ zo tce nui βyza nui*
 3SG.POSS-breath IPFV:UPSTREAM-suck EMPH DEM LNK fly DEM
 16732 *u-kur u-ŋgw i lu-nui-ce cti*
 3SG.POSS-mouth 3SG.POSS-in IPFV:UPSTREAM-AUTO-go be.AFF:FACT
 16733 '(The frog)_i draws its_i breath and the fly goes by itself into its_i mouth.'
 16734 '(27-qaCpa, 7)

16735 15.1.5.5 Stative verbs expressing size

16736 Adjectival verbs describing size, like other stative verbs, become dynamic verbs
 16737 ('become X') in the Imperfective (§21.2), the Irrealis (§21.4.1), the Aorist (§21.5.1.3)
 16738 and the Inferential (§21.5.2). The most neutral orientation preverbs for these
 16739 verbs are indicated in Table 15.7. Most positive adjectival verbs select the UP-
 16740WARDS orientation, except for those describing radial size (*jpum* 'be thick', *rjum*
 16741 'be broad') which are found with the WESTWARDS orientation, and those express-
 16742ing length (see below).

16743 It is much more difficult to ascertain the lexically selected orientation of nega-
 16744 tive adjectival verbs, since the situations in which their use as dynamic verbs is
 16745 appropriate ('become small(er)', 'become short(er)') are less common. The DOWN-
 16746WARDS orientation does occur as lexically selected orientation (with *xtci* 'be small'
 16747 and *mbyr* 'be low'), resulting in forms that are homophonous with the Past Im-
 16748 perfective (§21.5.3). Perhaps due to this homophony, the WESTWARDS orientation
 16749 is also used instead with *xtci* 'be small', as in (117).

- 16750 (117) *ki u-byri suustar zo u-cya*
 DEM.PROX 3SG.POSS-before COMP EMPH 3SG.POSS-age
 16751 *a-nur-xtci ra*
 IRR-PFV:WEST-small be.needed:FACT
 16752 'May she become younger than before!' (Norbzang 2005, 251)

16753 In addition to the orientations in Table (15.7), the DOWNSTREAM preverbs can
 16754 occur to express a progressive increase (§21.1.1.3). Compare for instance the use
 16755 of *wxti* 'be big' with the UPWARDS orientation in (118) with that in (119) with the
 16756 DOWNSTREAM orientation, describing a process taking place progressively over
 16757 many years.

- 16758 (118) *myzui zo u-k^ha ra to-wxti tce,*
 even.more EMPH 3SG.POSS-house PL IFR:UP-be.big LNK
 16759 'His house had become even bigger.' (140430 yufu he tade qizi-zh, 222)
- 16760 (119) *tceri u-tciu nuu zuruuzyri c^hy-wxti*
 LNK 3SG.POSS-son DEM progressively IFR:DOWNSTREAM-be.big
 16761 'His son progressively grew up.' (28-smAnmi, 10)

16762 Some of these verbs are compatible with more than one orientation. For in-
 16763 stance, *rjyi* 'be long' is attested with the UPWARDS orientation to refer to the
 16764 length of a vertical object, as in (120) (where it is synonymous with *mbro* 'be

Table 15.7: Adjectival stative verbs of size and orientation preverbs

Positive size	Orientation	Negative size	Orientation
<i>wxti</i> ‘be big’	up	<i>xt̪ci</i> ‘be small’	west, down
<i>mbro</i> ‘be big, be high’	up	<i>mbyr</i> ‘be low’ (of size)	down
<i>zri</i> ‘be long’,	up, downstream	<i>xtut</i> ‘be short’	west upstream
<i>rŋji</i> ‘be long’			
<i>jpum</i> ‘be thick’ (of radius)	west	<i>xts^hum</i> ‘be thin’ (of radius)	west, east
<i>jas</i> ‘be thick’ (of a surface)	up	<i>mba</i> ‘be thin’ (of a surface)	west
<i>rŋum</i> ‘be broad’	west	<i>tçrr</i> ‘be narrow’ <i>ŋyrr</i> ‘be narrow’	east east

high’). With the UPSTREAM preverbs, it describes for instance (elongated) fruits or leaves growing out of the branch of a plant, as in (121).

- 16765 (120) *tce <yimi> jamar ma tu-rŋji mx-c^ha ma*
 16766 LNK one.meter about apart.from IPFV:UP-be.long NEG-can:FACT LNK
 16767 ‘It cannot grow longer than about one meter.’ (11-qarGW, 114)

- 16768 (121) *turgi yuu u-mat lu-rŋji tsa ηu tce,*
 16769 fir GEN 3SG.POSS-fruit IPFV:UPSTREAM-be.long a.little be:FACT LNK
 16770 *nski jima popo tsa fse.*
 16771 FILLER maize cob a.little be.like:FACT
 ‘The fir cone is elongated, a bit like the corncob (07-tAtho, 32)

16772 The DOWNSTREAM preverbs are found to express progressive increase (example 119, §12.4.1.4, §22.2.1), as in (122), but can also refer to the growth of thread-like
 16773 objects like hair, as in (123). Note in this example that *rŋci* ‘pull’ shares the same
 16774 preverb to refer to the pulling of hairs.

- 16775 (122) *cyr nu c^hu-rŋji, sŋi nu*
 16776 night DEM IPFV:DOWNSTREAM-be.long day DEM
 16777 *c^hu-xtut jnu-ηu*
 16778 IPFV:DOWNSTREAM-be.short SENS-be
 ‘The nights are becoming longer, and the days shorter.’ (elicited)

- 16779 (123) *pur-kw̥-xtci tce, numua zŋgri nuu nuu-myŋzaþ*
 PST.IPFV-GENR:S/O-be.small LNK DEM star DEM AOR-marry
 16780 *u-ryŋ tce, tuu-kyrmə cʰu-wy-ryci tce,*
 3SG.POSS-time LNK GENR.POSS-hair IPFV:DOWNTSTREAM-INV-pull LNK
 16781 *cʰu-ryfi ŋu to-ti-nuu tce,*
 IPFV:DOWNTSTREAM-be.long be:FACT IFR-say-PL LNK
 16782 ‘When we were young, people said that when there is a shooting star, if
 16783 you pull your hair, it will grow longer.’ (29-mWBZi, 102)

15.1.5.6 Verbs related to growth, gain or birth

16785 Adjectival verbs of size can be used to express growth (§15.1.5.5), but another con-
 16786 structions expressing the same meaning involves the transitive verb *βzu* ‘make’
 16787 with a dummy subject (§14.3.5), and an adjectival verb in participial form (§16.1.1),
 16788 as in (124), with the UPWARDS orientation (compare with 120 above and 75 in
 16789 §14.3.3.1).

- 16790 (124) *cxy nuu li kuu-mbuu~mbro tu-βze cʰa*
 juniper DEM again SBJ:PCP-EMPH~be.high IPFV:UP-make[III] can:FACT
 16791 ‘The juniper grows very high.’ (08-CAG, 1)

16792 The UPSTREAM orientation appears to describe fruits or leaves growing out of
 16793 a plant, as in (125) (compare with 121 above).

- 16794 (125) *turgi laŋlaŋ nuunu, la-βzu cimuma nuu*
 fir cone DEM AOR:UPSTREAM:3→3'-make immediately DEM
 16795 *nuu-yrji,*
 SENS-be.green
 16796 ‘The fir cone is green when it has just grown out.’ (08-tWrgi, 72)

16797 The DOWNSTREAM orientation is found with long and thin thread-like objects,
 16798 like the stalks of some plants as in (126) (compare with 123), but also occur to
 16799 refer to fruits or grains (127), probably as an extension of the progressive incre-
 16800 mentation function of this orientation (119 above, §15.1.5.5).

- 16801 (126) *uu-ru ra kuu-xtsʰuu~xtsʰuum ŋu ri,*
 3SG.POSS-stalk PL SBJ:PCP-EMPH~be.thin be:FACT LNK
 16802 *kuu-zuu~zri zo cʰuu-βze qʰe,*
 SBJ:PCP-EMPH~be.long EMPH IPFV:DOWNTSTREAM-make[III] LNK
 16803 ‘Although its stalk is very thin, it grows very long.’ (19-qachGa mWntoR,
 16804 71)

- 16805 (127) *sun̥gwp̥yjka nuu uu-mat numuu pj̥ka kuu-fse*
 wild.squash DEM 3SG.POSS-fruit DEM squash SBJ:PCP-be.like
 16806 *cʰuu-βze,*
 IPFV:DOWNSTREAM-make[III]
 16807 ‘Wild squash grows fruits like those of the (cultivated) squash.’
 16808 (16-CWrNgo, 39)

16809 The intransitive verb *ndzṛt* ‘grow’ also selects the UPWARDS orientation to de-
 16810 scribe the growth of a plant, and the DOWNSTREAM preverbs for children, as in
 16811 (128).

- 16812 (128) *tx-p̥ytso cʰo-ndzṛt*
 INDEF.POSS-child IFR:DOWNSTREAM-grow
 16813 ‘The child grew up.’ (elicited)

16814 For growth in quantity rather than size, the UPWARDS orientation is selected,
 16815 for instance with the verb *dṛn* ‘be many’ in (129).

- 16816 (129) *tʰam tce myzui tx-dṛn-nui*
 now LNK even.more AOR:UP-be.many-PL
 16817 ‘Now they are even more numerous than before.’ (140522 tshupa, 86)

16818 The UPWARDS orientation is also selected by verbs expressing birth and coming
 16819 into existence such as *tu* ‘exist’ in (130) and (135) (note that its antonym *me* ‘not
 16820 exist’ rather selects the WESTWARDS orientation, §15.1.5.7), and verbs of Tibetan
 16821 origin such as *sci* ‘be born’ (131) and the honorific *mkʰroy* ‘be born, be reincar-
 16822 nated’ (132).

- 16823 (130) *ndzi-tcui ci to-tu*
 3du.POSS-son INDEF IFR:UP-exist
 16824 ‘They had one son.’ (2011-05-nyima, 2)

- 16825 (131) *uu-tcui to-sci ci uu-me to-sci?*
 3SG.POSS-son IFR-be.born QU 3SG.POSS-girl IFR-be.born
 16826 ‘Did she have a boy or a girl.’ (elicited)

- 16827 (132) *nuzora nuu-cki yui-to-mkʰroy juu-ŋu.*
 2PL 2PL.POSS-DAT CISL-IFR:UP-be.born SENS-be
 16828 ‘He had come to be born in their (family).’ (150825 nezha naohai-zh, 38)

The DOWNSTREAM orientation however occurs with verbs expressing humans or animals giving birth, such as the intransitive denominal verbs *rÿpu* ‘have young’, *rÿngum* ‘lay eggs’ and *rÿrit* ‘have a child’ (§20.4.1) and the light verb *bryt* ‘release’ in the meaning ‘give birth to’ in (133). This may be an extension of the elative function of the DOWNSTREAM preverbs (§15.1.4.2).

- (133) *ts^hyt nu_i t^hui-rÿpu_i* *tce, ɻnu_iz ntsu_i*
 goat DEM AOR:DOWNSTREAM-have.young LNK two always
c^hui-lxt *ŋgryl*
 IPFV:DOWNSTREAM-release be.usually.the.case:FACT
 ‘When goats have young, they give birth to two (kids) each time.’
 (05-qaZo, 7)

- (134) *tua-ji* *wi-ŋgu_i* *nuara* *c^hui-rÿngum*
 INDEF.POSS-field 3SG.POSS-in DEM:PL IPFV:DOWNSTREAM-lay.eggs
ŋgryl
 be.usually.the.case:FACT
 ‘It lays eggs in the fields.’ (24-kWmu, 85)

Verbs expressing gain select the DOWNTWARDS orientation, including the orientable verb *mja* ‘take’ (§15.1.2.2) when used in the meaning ‘obtain, get’ (example 91 in §19.7.3), *þjxt* ‘obtain’ (§19.7.3), *mto* ‘see’ (which can mean ‘find’ especially when used with the autive prefix, see §15.1.5.9 and §19.1.4) as well as the semi-transitive *aþe* ‘have to eat/drink’¹³ as in (135).

- (135) *a-kur* *wi-ŋgu_i* *tua-ci*
 1SG.POSS-mouth 3SG.POSS-in INDEF.POSS-water
pui-aþe-a *tce, a-sro_i* *to-tu*
 AOR:DOWN-be.needed.eat-1SG LNK 1SG.POSS-life IFR:UP-exist
 ‘I have water in my mouth to drink, my life is back.’ (2011-05-nyima, 69)

15.1.5.7 Verbs related to loss or death

Verbs expressing loss, with meanings such as ‘disappear’ or ‘lose’ generally select the orientation WESTWARDS, probably as an extension of its centrifugal use (§15.1.4.3). For instance, the verb *þde* ‘throw’, which can also be interpreted as meaning ‘lose’ when used non-volitionally (especially with the autive §19.1.6),

¹³This verb can be translated into Chinese as 吃到 <chídào> ‘have to eat’ or 喝到 <hēdào> ‘have to drink’.

16854 selects this orientation, as shown by (136), even though the loss of the hat (in the
 16855 pear story movie) involved a motion downwards.

- 16856 (136) *tce uu-rte ra pjy-nuu-βde tce,*
 LNK 3SG.POSS-hat PL IFR:WEST-AUTO-lose LNK
 16857 ‘(The boy) lost his hat’ (Pear story 2010, Tshendzin, 12)

16858 The same is observed with the verb *me* ‘not exist’ in (137), here also despite a
 16859 clear downward motion of the water level until the lake disappears.

- 16860 (137) *mts^hu nuu c^humc^hum zo, tce, tur-skym pjy-syza tce*
 lake DEM IDPH(II):slowly EMPH LNK INF:II-dry.up IFR:DOWN-start LNK
 16861 *mts^hu nuu pjy-me tce*
 lake DEM IFR:WEST-not.exist LNK
 16862 ‘The level of the lake started to go down slowly and the lake
 16863 disappeared.’ (nyima2003, 106)

16864 Verb expressing partial disappearance, such as *rkun* ‘be few’ in (138), also occur
 16865 with the WESTWARDS orientation.

- 16866 (138) *zgoku nutcu si nuu zuuruzyri nuu-pjy-rkun zo*
 mountain DEM:LOC tree DEM progressively INCR~IFR:WEST-be.few EMPH
 16867 ‘The trees on the mountain became fewer and fewer.’
 16868 (04-xiaocunzhuang-zh, 24)

16869 The verb *cq^hlyt* ‘disappear’, also semantically related to these verbs, is an ori-
 16870 entable motion verb (§15.1.2.1). It does not usually select the WESTWARDS orienta-
 16871 tion in a non-spatial way, except for the express the passing of time (§15.1.4.1). In
 16872 example (139), there is however some ambiguity as to whether the WESTWARDS
 16873 orientation is purely spatial (the setting of the sun in the west, see §15.1.3.3; note
 16874 that the vertical dimension is more commonly selected, §15.1.3.1), or whether it
 16875 could also be analyzed as centripetal.

- 16876 (139) *txye nuu nuu-cq^hlyt ku-nxjym ra k^hi*
 sun DEM IPFV:WEST-disappear IPFV-wait[III] be.needed:FACT hearsay
 16877 *ma txye nuu wuma zo nuu-me k^hi*
 LNK sun DEM really EMPH APPL-be.afraid[III]:FACT hearsay
 16878 ‘(The yeti) waits for the sun to disappear (before eating the man he has
 16879 caught), because he fears the sun, it is said.’ (140510 mYWrgAt, 7)

16880 It is possible that the centripetal function of the WESTWARDS orientation has
 16881 originated from a metaphoric extension of the disappearance of the sun in the
 16882 west at dusk, in which examples like (139) would be the pivot construction allowing
 16883 reanalysis from a purely spatial marker to a more abstract meaning such as
 16884 ‘away from the deictic center’ or ‘loss’.

16885 Verbs expressing a more abstract type of disappearance, such as the cognition
 16886 verb *jmut* ‘forget’ (memory loss), likewise select the WESTWARDS prefixes, as in
 16887 *jny-nuu-jmut-a* IFR:WEST-AUTO-forget-1SG ‘I forgot (about it)’ (see 162, §14.6.1.4).

16888 The verb *me* ‘not exist’ has another set of forms with the UPWARDS orientation,
 16889 as in (140). With the UPWARDS vertical preverbs, this verb does not entail
 16900 the presupposition that loss occurred; in the perfective, the *tx-me* with UPWARDS
 16901 orientation means ‘when there this no X’ (a usage found with other stative verbs,
 16902 §21.1.1.3), while *nuu-me* with WESTWARDS orientation can only be interpreted as
 16903 ‘(when) X disappeared/was lost’.

- 16894 (140) *nua ma si tx-me tce li nuu nuu-p^hut-nua*
 DEM apart.from wood AOR:UP-not.exist LNK again DEM IPFV-take.out-PL
 16895 ‘When there is no other wood than this, people cut it.’ (07-Zmbri, 65)

16896 As in many languages (for instance Indo-European **mer*, Rix et al. 2001: 439–
 16897 440), *me* in the meaning ‘disappear’ is commonly used as a euphemism for passing
 16898 away, as in (141).

- 16899 (141) *wuzo uu-χti jny-me tce,*
 3SG 3SG.POSS-companion IFR:WEST-not.exist LNK
 16900 ‘Her husband passed away.’ (12-BzaNsa, 127)

16901 Likewise, verbs expressing death and destruction, such as *si* ‘die’ and *χεακ* ‘pass
 16902 away’ (a borrowing from ἀπέγειται *gcegs* ‘go away’), *plut* ‘suppress, destroy’, *ndzuy*
 16903 ‘be destroyed’ select the WESTWARDS orientation, as shown by (142), (143) and
 16904 (202) further below (in §15.2.6).

- 16905 (142) *βdaθmu nuu to-ngo tce jny-si.*
 lady DEM IFR-be.ill LNK IFR:WEST-die
 16906 ‘The lady became ill and died.’ (2011-05-nyima, 5)

- 16907 (143) *jima uu-ryi nuu-pluit-i*
 maize 3SG.POSS-grain AOR:WEST-destroy-1PL
 16908 ‘We have used up all the maize grains.’ (elicited)

16909 The verb *si* ‘die’ alternatively also occur with the DOWNWARDS preverbs, in par-
 16910 ticular in the case of animals as in (144). With humans, using the DOWNWARDS
 16911 preverbs is not rude, but considered to be blunter than with the westwards’ pre-
 16912 verbs.

- 16913 (144) *tceu zara nuu-n̥armuu nuu pjy-si kʰi tce,*
 up.there 3PL 3PL.POSS-hybrid.cow DEM IFR:DOWN-die hearsay LNK
 16914 ‘Those up there, their cow died, it is said.’ (Tagrdo conversation, 2003)

16915 The transitive verb *sat* ‘kill’ also selects the DOWNWARDS orientation preverbs,
 16916 even when taking an associated motion prefix and an overt goal pointing to an
 16917 orientation other than DOWNWARDS, as in (145).

- 16918 (145) *atu p̥yrtcuu nuu c-pur-sat-nuu ra*
 up.there bird DEM TRAL-IMP:DOWN-kill-PL be.needed:FACT
 16919 ‘Go and kill the bird up there.’ (2005 Kunbzang, 330)

16920 Likewise, *ntcʰa* ‘kill, butcher’ (on whose etymology see Gong 2018: 303–309)
 16921 occurs with the DOWNWARDS preverbs in the meaning ‘kill (an animal)’, as shown
 16922 by (146).

- 16923 (146) *tce nuu-n̥urja pjy-nuu-ntcʰa-nuu*
 LNK 3PL.POSS-cow IFR:DOWN-AUTO-butcher-PL
 16924 ‘They killed their cow (for themselves to eat).’ (02-deluge2012, 17)

16925 The orientation WESTWARDS also occurs with this verb in the meaning ‘butcher’,
 16926 as illustrated by (147) and (148). On the other hand, *sat* ‘kill’ is not found with the
 16927 WESTWARDS preverbs.

- 16928 (147) *fsapas uu-ŋgru puu-nui-ŋu, ruudaa*
 domestic.animals 3SG.POSS-sinew PST.IPFV-AUTO-be 3SG.POSS-sinew
 16929 *uu-ŋgru puu-nui-ŋu, nuunui na-ntcʰa-nui tce*
 wild.animals PST.IPFV-AUTO-be DEM AOR:WEST:3→3'-butcher-PL LNK
 16930 *tu-tc̥xt-nuu tce tce tu-suay-rom-nuu.*
 IPFV:UP-take.out-PL LNK LNK IPFV-CAUS-be.dry-PL
 16931 ‘Whether it is sinew_i from a domestic or a wild animal,_j after they
 16932 butcher them,_j they take it_i out and dry it_i.’ (150906 tWNgru, 6)

15 Orientation and associated motion

- 16933 (148) *nunu pa-sat-nur tce tce ju-nu-yuit-nur tce*
 DEM AOR:DOWN:3→3'-kill-PL LNK LNK IPFV-VERT-bring-PL LNK
 16934 *nua-ntc^ha-nui*
 IPFV:WEST-butcher-PL
 16935 ‘After (the hunters) have killed (the animals)_i, they bring them_i home
 16936 and butcher them_i.’ (150829 KAGWcAno, 18)

15.1.5.8 Verbs of speech and sound

16938 Verbs of speech mainly select either the orientation UPWARDS (*ti* ‘say’, *ruçmi*
 16939 ‘speak’, *arju* ‘speak’, see for instance 123 in §15.1.5.5 and 19 in §14.2.4; their etymo-
 16940 logy is discussed in §20.2.1 and §20.6), with the exception of *fçrt* ‘tell’ (borrowed
 16941 from *bçad* ‘tell’), which occurs with the DOWNWARDS preverbs (see the Infer-
 16942 rential *pjx-fçrt* IFR:DOWN-tell ‘she told it’ in 127, §16.1.3.7). The intransitive verb
 16943 *mbri* ‘make a sound’, used for animals or objects, is also found with the UPWARDS
 16944 preverbs (see *to-mbri* IFR:UP-make.noise in 107, §16.1.1.5)

16945 The intransitive denominal verb *nuryyo* ‘sing’ (§20.7.1) on the other hand ap-
 16946 pears with the orientation DOWNSTREAM, as in (149), and this applies to transitive
 16947 verbs taking the base noun *rxyo* ‘song’ as objects (such as *c^hu-tu-za* and *c^hu-ti* in
 16948 150).

- 16949 (149) *qarts^hi nur sji tce c^hu-nuryyo ny*
 cicada DEM day LOC IPFV:DOWNSTREAM-sing ADD
 16950 *c^hu-nuryyo yu tce*
 IPFV:DOWNSTREAM-sing be:FACT LNK
 16951 ‘The cicada (was) singing all the time during the day.
 16952 (26-NalitCaRmbWm, 30)
- 16953 (150) *nunu rxyo c^hu-tu-za q^he, tyrciurca zo*
 DEM song IPFV:DOWNSTREAM-CONV:IMM-start LNK together EMPH
 16954 *c^hu-ti-nur to-c^ha-nui.*
 IPFV:DOWNSTREAM-say IFR-can-PL
 16955 ‘They became able to sing along as soon as it started its song.’ (140519
 16956 yeing-zh, 162)

16957 The choice of the DOWNSTREAM preverbs on verbs related to songs and music
 16958 is probably an analogical extension of its use with verbs related to wind instru-
 16959 ments, as in (151) and (152) (see also 178, §14.6.2).

- 16960 (151) *juli nur cʰy-lst.*
 flute DEM IFR:DOWNSTREAM-release
 'He played the flute' (140513 mutong de disheng-zh, 85)
- 16961
 16962 (152) *nunuara ku rkydaut cʰu-z-mbri-nu*
 DEM:PL ERG horn IPFV:DOWNSTREAM-CAUS-make.noise-PL
pjx-mtsʰym.
 IFR-hear
 'She heard (the hunters) blowing the horn.' (140520 ye tiane-zh, 249)
- 16963
 16964
 16965
 16966
 16967

The DOWNSTREAM preverbs on verbs of this type itself derives from their use with *yymut* 'blow' as in (153), itself an extension of their illative meaning ('into a tubular object', see §15.1.4.2).

- 16968 (153) *u-l̥cu cʰú-wy-yymut tce tuu-rtsʰyz*
 3SG.POSS-upstream IPFV:DOWNSTREAM-INV-blown LNK INDEF.POSS-lung
 16969 *nur nuu-fka ñu*
 DEM SENS-be.full be:FACT
 16970 'One blows (into the pig's trachea) and its lungs fill up.' (20-kAPjAt, 13)

15.1.5.9 Verbs of perception

16971 With the exception of the orientable verb *ru* 'look at' (§15.1.2.4), most verbs of
 16972 perception generally select only one orientation. The DOWNWARDS preverbs are
 16973 selected by the non-volitional verbs *mto* 'see' and *mtsʰym*, which generally means
 16974 'hear', but is also used for all non-visual non-volitional perception, including ol-
 16975 faction (example 122, §17.5.3), touch and the perception of vibrations as in (154).
 16976

- 16977 (154) *nuu-munmu ny nuu-munmu tce tce, nuu u-ŋguu NGOCNA*
 16978 IPFV-move ADD IPFV-move LNK LNK DEM 3SG.POSS-in spider
kua-ryzi nuu kua pjuu-mtsʰym tce
 16979 SBJ:PCP-stay DEM ERG IPFV:DOWN-feel LNK
 16980 'The fly that has been caught in the spider's web) moves and moves,
 and the spider staying inside feels it.' (26-mYaRmtsaR, 63-64)

16981 The other verbs each have a different orientation: the semi-transitive *syo* 'lis-
 16982 ten' selects the WESTWARDS preverbs (§15.1.5.2, §14.5.3), and the tropative verb
 16983 *nymnym* 'smell' (§17.5.3) the UPWARDS preverbs (examples 122 and 123, §17.5.3).
 16984 This orientation simply reflects that of the base intransitive verb *mnym* 'have a
 16985 smell'.

16986 15.1.5.10 Verbs of giving

16987 Ditransitive verbs expressing permanent or temporary transfer of property, in-
 16988 cluding *mbi* ‘give’, *kʰo* ‘give, pass’, *rjo* ‘borrow (from)’ and *nṛŋgu* ‘borrow (from)’
 16989 (and verbs derived from these), have different argument structures (§14.4.1 and
 16990 §14.4.2), but most of them select the WESTWARDS preverbs as default orientation,
 16991 perhaps reflecting the centripetal function of this orientation (§15.1.4.3), as in
 16992 English ‘give away’ or ‘give out’.

16993 For instance, the most common Inferential 3→3' forms of these verbs are *nṛ-
 16994 mbi*, *nṛ-mbi*, *nṛ-rjo* and *nṛ-nṛŋgu* (examples are plentiful elsewhere in this gram-
 16995 mar, for instance 14 in §8.1.7, 105 and 108 in §14.4.1 and 173 and 174 in §8.3.1).

16996 However, it is alternatively possible to choose a prefix reflecting the spatial
 16997 direction of the transfer of property. In (155), we find thus a DOWNWARDS orien-
 16998 tation preverb to describe a present (downwards) from heaven, and in (156) an
 16999 UPWARDS preverb expresses the relative vertical position of the recipient and the
 17000 subject: the latter being on the ground, while the former rides a tiger, the transfer
 17001 of property involves a motion upwards.

- 17002 (155) *tumukumpci kuu púr-wy-mbi-a nū*
 17003 heaven ERG AOR:DOWN-INV-give be:FACT
 ‘Heavens gave it to me.’ (Norbzang 2005, 312)

- 17004 (156) *laŋjuy nū u-taŋ nū u-pʰe to-kʰo tce,*
 17005 staff DEM 3SG.POSS-ON DEM 3SG.POSS-DAT IFR:UP-give LNK
 ‘He gave the staff to the (thief) who was on (the tiger).’ (khu2012, 15)

17006 The DOWNWARDS orientation can also be used more metaphorically to express
 17007 gift from someone higher up in the social hierarchy, as in (157).

- 17008 (157) *taŋ kui, <piaozi> púr-wy-mbi-j.*
 17009 up ERG money AOR:DOWN-INV-give-1PL
 ‘The ones above (the government) gave us money.’ (2010-09, 172)

17010 The riverine axis is also metaphorically used to express relative social status
 17011 with the verb *kʰo* ‘give, pass’. The DOWNSTREAM preverbs express transfer of
 17012 property from someone higher in the hierarchy (in particular, nobles or lamas)
 17013 to someone lower than himself. For instance in (158), the subject of *cʰy-tu-kʰo-*
 17014 *nū* ‘you gave it to her’ is a prince, and the recipient an unknown girl; note that
 17015 the DOWNSTREAM preverb co-occurs here with the honorific plural (§14.6.1.2), an-
 17016 other linguistic clue to the social status of the subject.

- 17017 (158) *nuitcu zuu lafta^b c^h-tui-k^h-o-nuu tce, nunuu*
DEM:LOC LOC token IPFV:DOWNSTREAM-2-give-PL LNK DEM
17018 *nur-juum nuu ciu-car-i ra*
3PL.POSS-wife.of.lama DEM TRAL-look.for:FACT-1PL be.needed:FACT
17019 ‘(Since) you have given her a token, we will go and look for this
17020 (woman, your wife.’ (sras 2003, 42)

17021 The opposite UPSTREAM orientation is found to express gift from someone
17022 lower in the hierarchy to an important person. In particular, it is the orientation
17023 selected by the honorific verb *p^hul* ‘offer’, which is borrowed from *gav* *p^hul*
17024 ‘offer’.

17025 15.1.5.11 Verbs of covering

17026 The verb *fka^b* ‘cover’ occurs with both the DOWNWARDS and DOWNSTREAM pre-
17027 verbs. The former are selected when the covering action involves a downwards
17028 motion (as in 159), or when describing the feeling of being completely covered
17029 by a roof (160b) or by the sky.

- 17030 (159) *tce ma nūnū kumpya nūnū, nykinū, pū-nūzūb tce u-mja^b*
LNK LNK DEM hen DEM FILLER AOR-sleep LNK 3SG.POSS-eye
17031 *ku-sywi jū-ŋu. tcei u-mja^b u-rq^hu nūnū, nykinū,*
IPFV-close SENS-be LNK 3SG.POSS-eye 3SG.POSS-husk DEM FILLER
17032 *pju-yi tce u-mja^brdū nū pju-fka^b*
IPFV:DOWN-come LNK 3SG.POSS-eyeball DEM IPFV:DOWN-cover
17033 *kui-fse jū-ŋu ma*
SBJ:PCP-be.like SENS-be LNK
17034 ‘When the hen falls asleep, it closes its eyes. Its nictitating membrane
17035 (literally: ‘eye husk’) comes down and covers its eyeball.’ (150819
17036 kumpGa, 52)

- 17037 (160) a. *maka k^ha ntsuu ku-kui-ryzi ku-kui-lkuuy*
at.all house always IPFV-GENR:S/O-stay IPFV-GENR:S/O-be.stiff
17038 *máj-sy-scit.*
NEG:SENS-PROP-be.happy
17039 ‘Staying at home all the time, one feels stiff, is is not nice.’
b. *pju-kuu-fka^b zo kui-fse*
IPFV:DOWN-GENR:S/O-cover EMPH SBJ:PCP-be.like
17041 ‘One feels like one is covered (oppressed).’ (conversation, 14-05-01)

15 Orientation and associated motion

17042 The DOWNSTREAM orientation rather express covering by growing (as in 161)
 17043 or building (162, like Chinese 盖房子 <gài fángzǐ> ‘build a house’).

17044 (161) *staxpwa t̪y-rŋjfi tce stor nuu cʰuu-fkaβ*
 pea AOR:UP-be.long LNK broad.bean DEM IPFV:DOWNSTREAM-cover
 17045 ‘When the pea has grown, it covers the broad bean.’ (25-sthoRthAB, 4)

17046 (162) *kʰa ra cʰy-fkaβ-ndzi*
 house PL IFR-cover-DU
 17047 ‘They built a house.’ (02-deluge2012, 131)

17048 However, example (163) shows that the verb *ta* ‘put’ occurs with the EAST-
 17049WARDS orientation to express a covering action, although a downwards manipulation
 17050 (putting clothes or hay on top of the pot) clearly takes place, as confirmed by
 17051 the DOWNTOWARDS preverb on *fkaβ* ‘cover’. The EASTWARDS orientation expresses
 17052 complete covering, including on the top and the sides, a use that may be related
 17053 to the centripetal function of these preverbs (§15.1.4.3).

17054 (163) *cizcʰiz ri nuu-ta-nuu tce tce, nyki, pjui-fkaβ-nuu.*
 somewhere LOC IPFV:WEST-put-PL LNK LNK FILLER IPFV:DOWN-cover-PL
 17055 *pjui-fkaβ-nuu tce tce, u-taŋ tce tuu-ŋga*
 IPFV:DOWN-cover-PL LNK LNK 3SG.POSS-on LOC INDEF.POSS-clothes
 17056 *ku-ta-nuu, soŋma ra ku-ta-nuu tce*
 IPFV:EAST-put-PL hay PL IPFV:EAST-put-PL LNK
 17057 ‘They put (the pot) somewhere and cover it. They cover it, put clothes or
 17058 hay on it.’ (160703 araR, 34-36)

17059 Likewise, the EASTWARDS preverbs are selected by *mpʰur* ‘wrap’ to mean ‘wrap
 17060 inside’ as in (164). The UPWARDS orientation occurs with this verb to mean ‘bind-
 17061 ing up’ a wound as in 165), and the DOWNSTREAM one for wrapping into a roll as
 17062 in (166).

17063 (164) *ckrbuu u-ŋguu nuutcu kú-wy-mpʰur yu.*
 onion.bun 3SG.POSS-in DEM:LOC IPFV:EAST-INV-wrap be:FACT
 17064 ‘People wrap it inside onion buns.’ (160706 thotsi, 43)

17065 (165) *murmumbju yuu u-tuymaz ra to-mpʰur.*
 swallow GEN 3SG.POSS-wound PL IPFV:UP-wrap
 17066 ‘She bound up the wound of the swallow.’ (150825 huluwa-zh, 40)

- 17067 (166) *tce βzur ri tce c^hú-wy-mp^hur*
LNK angle LOC LNK IPFV:DOWNSTREAM-wrap
17068 *c^hú-wy-za tce mypcos c^hu βzur nuu*
IPFV:DOWNSTREAM-INV-start LNK opposite.side APPROX.LOC angle DEM
17069 *w-cki myctṣa c^hú-wy-mp^hur.*
3SG.POSS-DAT until IPFV:DOWNSTREAM-wrap
17070 ‘One start wrapping (the square piece of cloth) on one of the angle up
17071 until the opposite angle (on the diagonal).’ (30-mboR, 20)

15.2 Associated motion

17072 An associated motion marker, following Guillaume’s (2016: 13) definition, is ‘a
17073 grammatical morpheme that is associated with the verb and that has among its
17074 possible functions the coding of translational motion.’ This definition excludes
17075 both motion verbs, which are not morphologically tied to the verb stem in the
17076 purposive construction (§16.1.1.6, §24.4.2.1) and orientation preverbs (§15.1), which
17077 do not express translational motion (of the whole body) by themselves in Japhug,
17078 though they can indicate in specific cases the direction of gestures involving the
17079 motion of a body part (§15.1.2.4).

15.2.1 AM prefixes: morphology

17080 Unlike Arandic (Koch 1984 and Wilkins 1991) and Tacanan (Guillaume 2009) lan-
17081 guages, Japhug and other Gyalrong languages have simpler AM systems with
17082 only two prefixes, andative/translocative and venitive/cislocative as illustrated
17083 by examples (167) and (168), respectively.

- 17084 (167) *tce tui-ci yu-pju-nui-ts^hi-nuu*
LNK INDEF.POSS-water CISL-IPFV-AUTO-drink-PL
17085 ‘(The wild yaks) come and drink water.’ (20-RmboN, 46)
- 17086 (168) *tce tui-ci c-pjy-nui-ts^hi.*
LNK INDEF.POSS-water TRAL-IFR-AUTO-drink
17087 ‘She went (there) and drank water.’ (140428 mu e guniang-zh, 72)

17088 AM prefixes in Japhug and other Gyalrong languages refer to a motion event
17089 occurring *before* the action of the main verb, resulting in a prior temporal relation
17090 with respect to the main verb, as in (167) and (168). There are no AM markers for
17091 subsequent or concurrent motion.

Table 15.8: Associated motion prefixes in Gyalrong languages

	come	CISL	go	TRAL
Japhug	<i>yi</i>	<i>yui-</i>	<i>ce</i>	<i>ciu-, c-, z-,z-</i>
Kyom-kyo (Situ)	<i>vi</i>	<i>və-</i>	<i>tʃ'i</i>	<i>fi-</i>
Cogtse (Situ)	<i>pô</i>	<i>po-</i>	<i>tʃ'ê</i>	<i>j-</i>
Brag-bar (Situ)	<i>βz̩e, və</i>	<i>jp-</i>	<i>tç'ê</i>	<i>çp-</i>
Tshobdun	<i>wî</i>	<i>o-</i>	<i>fð</i>	<i>fə-</i>
Zbu	<i>vâ</i>	<i>və-</i>	<i>xwé?</i>	<i>cə-</i>

17094 Table 15.8 presents the forms of AM prefixes in all four Gyalrong languages
 17095 (Jacques et al. forthcoming; data from Jacques 2013b, Gong 2018, Sun 2014a, Lin
 17096 2016, Zhang 2016: 200–204, Prins 2016: 497–500).

17097 As shown by the close phonetic resemblance between the motion verbs and
 17098 the corresponding AM prefixes, there is little doubt that the latter have been
 17099 grammaticalized from the former,¹⁴ probably through a paratactic or serial verb
 17100 construction in which motion verbs occurred in direct contact with the lexical
 17101 verb without intervening linker.

17102 Although attested, as in (§169), parataxis is rare in Japhug. It can also found
 17103 when the second verbs takes an AM marker (see 212, §15.2.8).¹⁵

- 17104 (169) *tcendyre tcetu zgo kuu-mbuu~mbro myctṣa to-ce,*
 LNK up.there mountain SBJ:PCP-EMPH-be.high until IFR:UP-go
 17105 *to-nurkunurba.*
 IFR:UP-climb
 17106 ‘He went up there, climbing, on the very high mountain.’ (150825
 17107 huluwa-zh, 156)

17108 Usually, when a motion verb is followed by or follows another verb, a linker
 17109 such as *tce* almost always occurs between them, as in (170).

¹⁴Exceptions however include the cislocative *jp-* in Bragbar Situ, whose origin is not straightforward (Zhang 2020), and the case of Zbu, where the motion verb *xwé?* is unrelated to the AM prefix.

¹⁵The preferred order is *to-nurkunurba to-ce*, and despite the absence of pause, *to-nurkunurba* here is an afterthought.

- 17110 (170) *pravpa u-ŋgwi lu-ce tce*
 17111 cave 3SG.POSS-inside IPFV:UPSTREAM-go LNK
lu-cuu.
 17112 IPFV:UPSTREAM-hibernate
 17113 ‘(Otherwise, the bear) goes into a cave and hibernates (there).’ (21-pri,
 108)

17114 The grammaticalization of motion verbs to AM prefixes, from a construction
 17115 similar to that in (§169), occurred in the common ancestor of all Gyalrong lan-
 17116 guages, rather than independently in each language, as is shown by the fact that
 17117 the transitive verb ‘to bring, to fetch’ (Japhug *ru*, Bragbar Situ *rō / rô*) shares a
 17118 common irregularity in all languages (Jacques 2013b): it must appear with an
 17119 associated motion prefix. In examples (§171) and (§172) from Japhug and Situ re-
 17120 moving the AM prefix would result in incorrect forms (§15.2.9).

- 17121 (171) *c-ty-ru-t-a*
 17122 TRANSL-AOR:UP-bring-PST:TR-1SG
 ‘I fetched it.’ (Japhug)
- 17123 (172) *rə-će-rō-ŋ*
 17124 AOR:UP-TRANSL-bring[II]-1SG
 ‘I fetched it.’ (Situ)

17125 In the Japhug verbal template, AM prefixes occupy slot -4, just after modal and
 17126 negative prefixes (§11.2), but before orientation preverbs (§15.1.1.1, see also (167)
 17127 and (168) above) unlike in Situ, where AM occur closer to the verb stem than the
 17128 orientation preverbs (as shown by §172).

17129 The translocative and cislocative prefixes however may not be equally ancient.
 17130 There is no doubt that the translocative prefix can be reconstructed to proto-
 17131 Gyalrong, because in addition to the irregular verb ‘fetch’, it does not superfi-
 17132 cially resemble the verb ‘to go’ in Situ and Zbu (see Table 15.8) and therefore
 17133 cannot have been recently grammaticalized. This idea is supported by the high
 17134 allomorphy of this prefix (§15.2.1.2). The only language with a translocative pre-
 17135 fix that is not cognate with the rest of Gyalrong is the Cogtse dialect of Situ,
 17136 where the prefix *j-* originates from the indefinite orientation preverb (Japhug *jv-*)
 17137), replacing the inherited prefix.

17138 The cislocative prefix on the other hand lacks any allomorphy, and its initial
 17139 consonant is identical to that of the verb ‘come’ (with its main vowel either con-
 17140 verted to a schwa or identical to that of the verb stem in the case of Cogtse)

in almost all languages including Tshobdun (where *o-* comes from **wə-*, the reduced form of *wî* ‘come’), the only possible exception being the Bragbar dialect of Situ. It is therefore possible that each Gyalrong language has independently innovated a cislocative prefix from its verb ‘come’ after the breaking up of proto-Gyalrong, and that the proto-Gyalrong only had one AM prefix with neutral deixis. The introduction of a cislocative AM affix grammaticalized from the verb ‘come’ in a system which originally only comprised a single AM marker is attested in Manchu ([Alonso de la Fuente & Jacques 2018](#)), and a similar process may have taken place in Gyalrong languages.

15.2.1.1 Cislocative

The cislocative (or venitive) *yuu-* is superficially homophonous with one of the allomorphs of the inverse prefix *yuu-* ([§14.3.2.7](#)) and with one denominal prefix ([§20.5](#)), but cannot be confused with either one; nevertheless some discussion concerning the distinction between the inverse and the cislocative can be useful to readers of Japhug texts.

Since the cislocative and the inverse do not occur in the same slot, and in particular before and following the orientation preverbs, they two are easily distinguishable in forms having orientation preverbs such as ([173](#)) (where *yuu-* can only be the cislocative, not the inverse, since it occurs on the left of the orientation preverb *tu-*).

- (173) *qajuu ra tu-ndze ma tx-rvku yuu-tu-ndze*
 bugs PL IPFV-eat[III] LNK INDEF.POSS-crops CISL-IPFV-eat[III]
mx-ŋgrvl
 NEG-be.usually.the.case:FACT
 ‘It eats bugs, and does not come and eat the crops.’ (24-ZmbrWpGa, 129)
 (Japhug)

The only type of forms where a confusion could potentially arise is in the non-past factual, without second person arguments (which are indexed by prefixes, see [§14.2.1.2](#)). Even in such forms, since the inverse receives stress, and since it is incompatible with stem III ([§12.2.2.2](#), [§14.3.2.8](#)), verbs with stem alternation will not have ambiguous forms at least in the singular, as illustrated by the contrast between *yúu-ndza* (inverse, stem I) in ([174](#)) and *yuu-ndze* (cislocative, stem III) in ([175](#)).

- 17172 (174) *tce uzo nuu p^byo matci tce, numasny yú-nadza p^by-ηu.*
 LNK 3SG DEM IFR-AUTO-flee LNK LNK otherwise INV-eat:FACT IFR-be
 17173 ‘(The rabbit), he fled away, otherwise he would have been eaten.’ (140427
 17174 qala cho kWrtsgag, 76)
- 17175 (175) *tx-ryku kuu-fse yuu-ndze*
 INDEF.POSS-crop SBJ:PCP-be.like CISL-eat[III]:FACT
 17176 *my-ŋgryl*
 NEG-be.usually.the.case:FACT
 17177 ‘It does not come and eat crops.’ (23-pGAYaR, 26)

17178 It is perfectly possible for the inverse (in its non-initial allomorph *-wy-*) to
 17179 directly follow the cislocative, which in this case receives the stress, as *yú-wy-*
 17180 *ndza* in (176).

- 17181 (176) *k^bu a-jy-zyut ndy yú-wy-ndza juu-ηu*
 tiger IRR-PFV-arrive LNK CISL-INV-eat:FACT SENS-be
 17182 ‘If the tiger arrives, it (the tiger) will eat him (the man).’ (kandZislama
 17183 2003, 100)

15.2.1.2 Translocative

17184 Unlike the cislocative, the translocative (or andative) prefix presents an impor-
 17185 tant degree of allomorphy. Besides the main allomorph *cuu-*, the consonantal al-
 17186 lomorphs *c-*, *z-*, *s-* and *z-* are also found. These allomorphs are only attested in
 17187 direct contact with orientation preverbs, following the rules in Table 15.9.
 17188

Table 15.9: Allomorphs of the translocative prefix

Allomorph	Orientation preverb
<i>c-</i>	<i>tu/γ/o/a-, puu/a-, t^buu/a-, ku/γ/o/a-, pjuu/γ-, (c^buu/γ-)</i>
<i>z-</i>	<i>lu/γ/o/a-, nuu/a-, (nuu/γ-)</i>
<i>s-</i>	<i>c^buu/γ-, (pjuu/γ-)</i>
<i>z-</i>	<i>ju/γ/o/a-, juu/γ-</i>

17189 The dental allomorphs *s-* and *z-* are only found with orientation preverbs with
 17190 a palatal consonant, and result from dissimilation in place of articulation from
 17191 their alveolo-palatal counterparts. They harmonize in voicing with the following

15 Orientation and associated motion

17192 orientation preverb, *s-* being found before the orientation preverbs in *c^h-* and *pj-*,
 17193 and *z-* before those in *j-* and *jn-*.

17194 The alveolo-palatal allomorphs are found with non-palatal orientation pre-
 17195 verbs, and also harmonize in voicing with the following consonant, *ç-* occurring
 17196 before unvoiced prefixes (*ç-tu-k^hat-a* in 178 below) and *z-* before voicing ones as
 17197 in (177).

- 17198 (177) *tcendyre ui-puu ra nuu-ndza z-na-car*
 LNK 3SG.POSS-young PL 3PL.POSS-food TRAL-AOR:3→3'-search
 17199 ‘The (cat mother) went to look for food for her (kitten).’ (21-lWLU, 80)

17200 The alveo-palatal allomorphs are also used with the palatal orientation pre-
 17201 verbs, as shown by the form *z-nuu-lat-a* (instead of *z-nuu-lat-a*) in (178) (for an ex-
 17202 ample of *ç-c^hu-*, see 2, §4.2.1.5). With *c^h-*, *j-* and *jn-* prefixes, the alveolo-palatal
 17203 allomorphs are very rare, but with *pj-* prefixes interestingly, the dissimilatory ef-
 17204 fect is much more limited and *ç-* is more common than *s-* (§4.2.2.2), as shown by
 17205 the counts in Table 15.10.

- 17206 (178) *nunu zakastaka kui-tu nuunu yuu nuu-<gongfen> ra*
 DEM each SBJ:PCP-exist DEM GEN 3SG.POSS-work.point PL
 17207 *z-nur-lat-a ç-tu-k^hat-a puu-ra.*
 TRAL-IPFV-throw-1SG TRAL-IPFV-do.everywhere-1SG PST.IPFV-be.needed

17208
 17209 ‘I had to go everywhere to count work points for every single person.’
 17210 (2010-09, 79)

Table 15.10: Number of attestations of the allomorphs of the transloca-
 tive prefix with palatal orientation preverb

Prefixes	<i>ç-</i>	<i>z-</i>	<i>s-</i>	<i>z-</i>
<i>pjV-</i>	95	3		
<i>c^hV-</i>	1	53		
<i>jV-</i>		4	96	
<i>jV-</i>		0	62	

17211 Some clusters, such as *çpj-*, *zn-*, *cc^h-* and *zjn-*, are only attested in translocative +
 17212 orientation preverb combinations (§4.2.1.5).

17213 With prefixes other than orientation preverbs, such as infinitive *kr-* (179) or se-
 17214 cond person *tua-* (180), only the allomorph *cua-* is found. The infinitive *kr-* and the
 17215 east/centripetal orientation preverb *kr-* can thus be distinguished by their com-
 17216 patibilities with the allomorphs of the translocative prefix, the former occurring
 17217 with *cua-*, and the latter with *c-*.

- 17218 (179) *tcendyre nutcu cuu-ky-ryngum ndyre kumpyytcuu müj-nyz*
 LNK DEM:LOC TRAL-INF-lay.eggs LNK sparrow NEG:SENS-dare
 17219 ‘The sparrow does not dare to lay eggs there (on the ground).’
 17220 (22-kumpGatCW, 90-91)

- 17221 (180) *ma-cua-tua-nytuti*
 NEG-TRAL-2-tell.everywhere
 17222 ‘Do go around talking about it.’ (2002 qaCpa, 252)

17223 In Factual Non-Past prefixless forms, the allomorph *cua-* is also the only possi-
 17224 ble one, as in (181) ($\dagger c$ -te would be an incorrect form).

- 17225 (181) *tce ndzi-ŋga cuu-te pjy-ra*
 LNK 3DU.POSS-clothes TRAL-put[III]:FACT PST.IFR-be.needed
 17226 ‘She had to make their beds (cover them with a quilt).’ (2003 kWBRa, 76)

15.2.2 Argument of motion

17228 The argument undergoing the motion event is always the subject in the case of
 17229 intransitive, semi-transitive (182), and transitive verbs (183). It is thus impossible
 17230 to interpret *c-puu-syŋo* in (182) as meaning something like ‘listen to X, after X has
 17231 gone there’ (motion of semi-object) or *c-puu-sat* in (183) as meaning ‘kill the boar,
 17232 after it has gone there’ (motion of object).

- 17233 (182) *aki c-puu-syŋo*
 down TRAL-IMP-listen
 17234 ‘Go down there and listen’ (many attestations).

- 17235 (183) *pʰaʂrgot ci tu tce, nuu c-puu-sat ra*
 boar INDEF exist:FACT LNK DEM TRAL-IMP-kill be.needed:FACT
 17236 ‘There is a boar, go and kill it.’ (140428 yonggan de xiaocafeng-zh,
 17237 227-228)

This is also true in inverse (mixed and non-local) verb forms. In (184) for instance, the argument whose motion is indicated by the cislocative prefix is necessarily *tyndzi t̪r-mu* ‘the ghost woman’, the subject of the transitive verb *yuu-túu-wy-musnuyarə*, and also the subject the preceding motion verb *yi* (a case of AM echo, §15.2.8). The cislocative *yuu-* cannot be interpreted as expressing the motion of the object (2SG) (‘you will come and she will do you harm’).

- (184) *tct̪'a nuu tyndzi t̪r-mu nuunu yi tce nyzo*
 later DEM ghost INDEF.POSS-mother DEM come:FACT LNK 2SG
yuu-túu-wy-nusnuyarə cti
 CISL-2-INV-do.harm be.AFF:FACT
 ‘The ghost woman will come and cause you harm.’ (150907
 niexiaoqian-zh, 96)

The same rule is observed in local configurations. In (185), the verb form *yuu-pjui-kuu-mja-a* cannot be interpreted as meaning ‘Now that I have come here, take me’: the cislocative motion event concerns the subject, not the object.

- (185) *azō kure ryz̪i-a, tce yuu-pjui-kuu-mja-a wo*
 1SG here stay:FACT-1SG LNK CISL-IPFV-2→1-take-1SG SFP
 ‘I am here, come and take me!’ (150825 huluwa-zh, 193)

In causative constructions however, the argument of motion can be either the causer or the causee (§17.2.4.5; on the syntactic status of the causee, see §14.4.3 and §17.2.4.2). For instance, the form *yuu-cʰu-sui-χtu-nu* could either mean ‘they send (cause to come) X here to buy Y’ or ‘they come and make X buy Y’; (186) illustrates the first interpretation.

- (186) *tce kupa-cʰu nuara atʰi pcos nuara, u-pci*
 LNK Chinese-LOC DEM:PL downstream direction DEM:PL 3SG-outside
nuara kuu kure ri yuu-cʰui-sui-χtu-nu nyu.
 DEM:PL ERG here LOC CISL-IPFV:DOWNSTREAM-CAUS-buy-PL be:FACT
 ‘People from the Chinese areas, people from outside send people here to buy (matsutake).’ (20 grWBgrWB 58)

In the case of manipulation verbs, the motion can involve both the subject *and* the object. In (187) for instance, the cislocative does refer to the motion of the *object* (the character who has been sent down), but it is implied that he did not come alone, and was brought to his current place by the unspecified *subject* of the verb *yuu-pj̪y-wy-l̪yt* ‘s/he/they sent/brought him down’.

- 17267 (187) *wi-scun pŷr-tu tce, ... kutcu yur-pŷr-wy-lxt*
 3SG.POSS-fault PST:IPFV-exist LNK here CISL-IFR:DOWN-INV-release
 17268 *pŷr-ŋu.*
 PST:IPFV-exist
 17269 'He had broken the law, ... and had been sent (down) here (to earth, as
 17270 punishment).' (180501 xiyouji 08-zh, 123-124)

17271 A similar use of the cislocative with the verb *lxt* 'release' in the sense of 'bring,
 17272 send' (someone) is found in example (23) above.

15.2.3 Motion verbs and AM prefixes

17274 In Japhug, there is no constraint on AM prefixes occurring on motion verbs with
 17275 the same deixis. Examples (188) and (189) illustrate the cislocative on the verb
 17276 *yi* 'come' and the translocative on the verb *ce* 'go', respectively. Such examples
 17277 are not common enough to allow a clear analysis of the semantic value of the
 17278 redundant AM in these examples.

- 17279 (188) *<jiazhang> ra ju-yi-nu tce <laoshi> wi-cki, tur-cki*
 parents PL IPFV-COME-PL LNK teacher 3SG.POSS-DAT GENR.POSS-DAT
 17280 *zo yu-ju-yi-nu cti netci?*
 EMPH CISL-IPFV-COME-PL be.AFF:FACT SFP
 17281 'The parents come, come to the teachers (us), right?'
 17282 (conversation140501 01, 60)
- 17283 (189) *li nyki icq^ha nu tyjlu ky-rku wi-ŋgur*
 again DEM the.aforementioned DEM flour OBJ:PCP-put.in 3SG.POSS-inside
 17284 *zu c-pŷr-ce*
 LOC TRAL-IFR:DOWN-go
 17285 'He went into (a bag of) flour.' (140519 chou xiaoya-zh, 145)

17286 The opposite combinations, namely cislocative with *ce* 'go' and translocative
 17287 with *yi* 'come', are not grammatical.

17288 In the case of motion verbs without an intrinsic locative goal such as *ŋke* 'walk',
 17289 the presence of the translocative does not add a locative goal (unlike when used
 17290 with non-motion verbs, see §15.2.7). In (190) for instance, no specific location is
 17291 specified even in the previous clauses, and the translocative on *ŋke* indicates that
 17292 the motion took place far away from the deictic center (the king's palace).

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- 17293 (190) *tcendyre numuu c-to-nuu-ŋke-nuu tce, lu χsuw-xpa*
LNK DEM TRAL-IFR-APPL-walk-PL LNK year three-year
17294 *c-pjy-ŋke-nuu,*
TRAL-IFR-walk-PL
17295 ‘The ministers went to look for (the girl), they walked for three years.’
17296 (sras 2003, 50)

17297 Participle used in the purposive complements of motion verbs (§16.1.1.6) do
17298 not take AM prefixes.

15.2.4 Orientation and AM

17300 In Japhug, AM markers only specify deixis and the temporal relation between
17301 motion event and verbal action, but are neutral as far as the orientation of the
17302 motion event is concerned.

17303 Orientation and AM markers occupy different prefixal slots. Apart from ori-
17304 entable verbs (§15.1.2), most verbs select one or two lexicalized orientations (see
17305 §15.1.5). For instance, the transitive *murkui* ‘steal’ occurs with the orientation
17306 UPWARDS (with the orientation preverbs *tr-*, *ta-*, *tu-*, *to-*, see §15.1.1).

17307 When non-orientable verbs occur with AM, the verb normally keeps its lex-
17308 icalized orientation preverb, as in (191), where *murkui* ‘steal’ is used with the
17309 expected *tu-* UPWARDS prefix. In this context, the motion related to the act of
17310 stealing occurs at the same horizontal level and there is no upward motion; the
17311 orientation preverb here encodes the default lexicalized orientation for the verb
17312 *murkui* ‘steal’, and is thus irrelevant to the motion event itself.

- 17313 (191) *kua-nyo nuu q^he ci ci c-tu-murki*
SBJ:PCP-be.defeated DEM LNK one one TRAL-IPFV-steal[III]
17314 *kua-fse ma nuu ma muu-nuu-yue.*
SBJ:PCP-be.like apart.from DEM apart.from NEG-SENS-be.needed.eat
17315 ‘The (lion) which is defeated steals a little out of it, but apart from that
17316 has nothing to eat.’ (20-sWNgi, 65)

17317 Similarly, in (192), the verb *skuu* ‘bury’ appears with the lexical orientation
17318 DOWNWARDS, although the associated motion event is oriented towards the op-
17319 posite direction, as indicated by the adverb *tqetu* ‘up there’.

- 17320 (192) *ki a-tcur ki tcetu zgoku tce*
DEM.PROX 1SG.POSS-son DEM.PROX up.there mountain LOC
17321 *c-pjuu-ski-a jjuu-nts^{hi}i*
TRAL-IPFV:DOWN-bury[III]-1SG SENS-be.better
17322 ‘Let’s bury my son up there on the mountain.’ (150904 cuzhi-zh, 119)

17323 However, alternatively, the orientation preverbs of verbs with an AM marker
17324 can also reflect the orientation of the motion event. In (193), the verb *ntsye* ‘sell’
17325 occurs with the orientation preverbs UPWARDS (*c-tu-ntsye-a*) and DOWNWARDS (*c-
17326 pjuu-ntsye-a*). The lexicalized orientation normally selected by *ntsye* ‘sell’ is the
17327 ‘westward; centrifugal’ one (§15.1.4.3). In (193) the UPWARDS and DOWNWARDS
17328 prefixes clearly correlate with those found on the manipulation verb *yut* ‘bring’
17329 and express the direction of the motion event.

- 17330 (193) *rja yuu ui-laxte^{ha} tu-yut-a tce pot zuu*
China GEN 3SG.POSS-thing IPFV:UP-bring-1SG LNK Tibet LOC
17331 *c-tu-ntsye-a, pot yuu ui-laxte^{ha} pjuu-yut-a*
TRAL-IPFV:UP-sell-1SG Tibet GEN 3SG.POSS-thing IPFV:DOWN-bring-1SG
17332 *tce, rja zuu c-pjuu-ntsye-a.*
LNK China LOC TRAL-IPFV:DOWN-sell-1SG
17333 ‘I bring things (down) from central Tibet, and sell them in China.’
17334 (28-qAjdoskAt, 15-16)

17335 Overriding of the lexical orientation by the motion event is found in particular
17336 in the case of AM prefixes expressing round trips (§15.2.5). In (194) for instance,
17337 the translocative *z-lu-murki-a* with the UPSTREAM preverb expresses the fact that
17338 the main character of the story steals from a place located downstream (first
17339 motion event, indicated by the AM prefix) and then brings it upstream (second
17340 motion event, whose orientation is encoded by the preverb). Interestingly, after
17341 a few occurrences of the verb *murkuu* ‘steal’ with AM and UPSTREAM orientation,
17342 one finds examples of that verb with the same non-lexicalized orientation
17343 UPSTREAM but without the AM prefix in the same text, as in (195).

- 17344 (194) *tcet^{hi} t̪ymuj jlyruucyrna yuu ui-p^he nautcu kui-murkuu*
downstream TOPO TOPO GEN 3SG.POSS-DAT DEM:LOC SBJ:PCP-steal
17345 *c^hui-ce-a yju tce. ts^hyt ui-bruu yuu*
IPFV:DOWNSTREAM-go-1SG be:FACT LNK goat 3SG.POSS-horn GEN
17346 *ui-ci nuunu z-lu-murki-a ri*
3SG.POSS-water DEM TRAL-IPFV:UPSTREAM-streal[III]-1SG LNK

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- 17347 *a-q^bu zuu ly-ye-nur tce*
17348 1SG.POSS-after LOC AOR:UPSTREAM-come[II]-PL LNK
17349 ‘(Tomorrow morning) I will go downstream to steal from Tamuj
17350 Jlarukyarna, I will steal the water from the goat’s horn, but when (the
mountain god) comes after me...’ (25-kAmYW-XpAltCin, 31-32)
- 17351 (195) *lo-murkua pjyr-c^ba tce lo-yut ri*
17352 IFR:UPSTREAM-steal IFR-can LNK IFR:UPSTREAM-bring LNK
17353 ‘He was able to steal it and brought it upstream.’
(02-montagnes-kamnyu-cz, 31)

17354 In some limited contexts, it is thus possible for verbs without associated motion
17355 markers to use their orientation preverb to indicate the direction of the action,
17356 with or without motion, as in (195).

17357 In (196), similarly, we find the verb *lu-pe-a* with the UPSTREAM orientation with-
17358 out an associated motion marker; when this sentence was uttered, we were sit-
17359 ting far from the door, and to close the door it was necessary to get up and walk
17360 a few meters (we were seated at a place closer to the river, so the door was UP-
17361 STREAM, §15.1.3.2). The same sentence could have been uttered if the door had
17362 been at a hand’s reach, and could thus have been closed without walking. Re-
17363 placing *lu-pe-a* in (196) by *z-lu-pe-a* TRAL-IPFV:UPSTREAM-close[III]-1SG, with an
17364 associated motion marker, would make the second interpretation impossible.

- 17365 (196) *tci-kuum lu-pe-a je!*
17366 1DU.POSS-door IPFV:UPSTREAM-close[III]-1SG SFP
‘Let me close the door (for us).’ (conversation, 03-05-2018, Tshendzin)

17367 It is debatable whether the orientation preverbs in examples like (195) and (196)
17368 could be analyzed as marking associated motion (in Guillaume’s 2016 definition),
17369 as these prefixes do not actually specify that a motion event takes or does not
17370 place. What they specify is that if the main action is linked with a translational
17371 motion event, that motion event follows the direction indicated by the prefix. In
17372 this grammar, the use of orientation preverbs in examples such as (195) and (196)
17373 are therefore not considered to be cases of associated motion.

17374 15.2.5 Round trips

17375 The combination of some verbs with AM prefixes implies a round trip when the
17376 lexical orientation (§15.1.5) is overridden by the orientation of the motion event
17377 (§15.2.4).

17378 With the verb *χtui* ‘buy’ for instance, the translocative expresses a first trip
 17379 to the goal indicated by the locative *ri* (§15.2.7), but a second trip back to the
 17380 deictic center (here, Kamnyu) is implied by the selection of the DOWNSTREAM
 17381 orientation (§15.2.4).

- 17382 (197) *tce mbroχpa ri jla nuu s-c^hu-χtui-nuu*
 LNK nomad LOC hybrid.yak DEM TRAL-IPFV:DOWNSTREAM-buy-PL
 17383 *βja puu-ra.*

completely PAST.IPFV-be.needed

17384 ‘People had to buy hybrid yaks from the nomads.’ (150820 kAnWCkat,
 17385 26)

17386 In (198), the cislocative indicates a first trip from Chinese areas up to Mbarkham
 17387 (the deictic center, *kure ri* ‘here’), and then back to Chinese areas, as indicated
 17388 by the choice of the DOWNSTREAM preverb (§15.1.3.2).

- 17389 (198) *wi-pci nuura kuu kure ri yuu-c^hu-suu-χtui-nuu*
 3SG-outside DEM:PL ERG here LOC CISL-IPFV:DOWNSTREAM-CAUS-buy-PL
 17390 *ŋu.*
 be:FACT

17391 ‘People from outside send people to come here and buy (matsutake).’ (20
 17392 grWBgrWB, 58)

17393 AM markers expressing round trips are found with a handful of verbs, for
 17394 instance *murku* ‘steal’ (194), expressing actions which can be considered to have
 17395 been fully completed only when the subject comes back to his starting point
 17396 with the object. The verb *ru* ‘fetch, bring’, which requires to be used with an AM
 17397 prefix, always implies a two way trip (§15.2.9). As in examples (197) and (198),
 17398 the AM prefix encodes the deixis of the first trip, and the orientation preverb the
 17399 direction of the second trip back – hence the motion of the first trip is always in
 17400 a direction opposite to that indicated by the preverb.

15.2.6 The nature of the motion

17401 In Japhug, AM prefixes express physical translation from one place to another,
 17402 and unlike other Gyalrong languages do no have grammaticalized uses like pros-
 17403 pective.

17404 The cis- and translocative prefixes only refer to motion events occurring *before*
 17405 the action of main verb (§15.2.1). The verbal action does not necessarily take
 17406 place immediately after the motion. In (199) for instance, ‘learning computers’

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17408 is one of the many activities that the referent did in Chengdu, and took place a
 17409 considerable amount of time after the travel from Mbarkham to Chengdu itself.
 17410 Here the translocative specifies that the action took place at such a distance from
 17411 the deictic center that motion was necessary.

- 17412 (199) *at^{hi} u-pci ri <chengdu> ri <diannao> ci*
 downstream 3SG.POSS-outside LOC Chengdu LOC computer INDEF
 17413 *c-pa-βzjox*
 TRAL-AOR:3→3'-learn
 17414 ‘He went outside of (Tibetan areas, downstream), to Chengdu, and
 17415 learnt computers there a little bit.’ (12-BzaNsa, 82)

17416 AM markers are not exclusively used to describe walking or motion on land
 17417 (199). They can also be applied to flying, as in (200), where *nutcu c-tu-ndze* literally
 17418 means ‘it flies there and eats it’. In this example, the translocative is in echo with
 17419 the manipulation verb *tsum* ‘take away’ (§15.2.8.1).

- 17420 (200) *p^hyri pras u-ŋgu myctṣa ku-tsum q^he, tce*
 the.opposite.side cliff 3SG.POSS-in until IPFV:EAST-take.away LNK LNK
 17421 *nutcu c-tu-ndze juu-ŋu.*
 DEM:LOC TRAL-IPFV-eat[III] SENS-be
 17422 ‘(The eagle) takes (the young animal) to the cliff on the other side (of the
 17423 river) and eats it there.’ (19-qandZGi, 51)

17424 Additionally, they are attested in the case of motion in a liquid (involving for
 17425 instance swimming), as in example (248) in §15.2.10.5, and also plants growing
 17426 from one place to another (201).

- 17427 (201) *tce u-zrym ju-ce q^he nure ri, kumav u-pcoꝝ*
 LNK 3SG.POSS-root IPFV-go LNK DEM:LOC LOC other 3SG.POSS-place
 17428 *c-tu-łob juu-cti ma*
 TRAL-IPFV-come.out SENS-be.AFF LNK
 17429 ‘Its root moves and it grows there, at a different place.’ (15-babW, 46)

17430 In (202), the motion implied by the translocative is more metaphorical, as it
 17431 refers to the reincarnation of a lama in a house different from the one he was
 17432 born in in his previous life. In (132) above (§15.1.5.6), the cislocative occurs in this
 17433 meaning.

- 17434 (202) *a-nuu-χcas, a-nuu-si tce tce, kumab pcos ri li*
 IRR-PFV-pass.away IRR-PFV-die LNK LNK other place LOC again
 17435 *c-tu-sci nuu-ŋu.*
 TRAL-IPFV-be.born SENS-be
 'When (the reincarnated lama) passes away, he is born in another place.'
 17436 (160722 skWBli, 2)

17438 In the case of (203), the translocative may be interpreted as referring to the
 17439 motion of the seed, but since this example comes from a traditional story where
 17440 the larch is humanized (since its relation to the fir is compared to that of a nephew
 17441 to its uncle), it may also be viewed here as a metaphorical human-like motion.¹⁶

- 17442 (203) *tce sacuu nuu turgi uu-locu zuu c-to-łor tce,*
 LNK larch DEM fir 3SG.POSS-upstream LOC TRAL-IFR-come.out LNK
 17443 *tce numuu tx-ftsa nuu tx-rpuu syz*
 LNK DEM INDEF.POSS-nephew DEM INDEF.POSS-MB COMP
 17444 *lu-kui-majlo muu-pjy-ŋgryl*
 IPFV:UPSTREAM-GENR:S/O-be.upstream NEG-IFR.IPFV-be.usually.the.case
 17445

17446 'The larch grew on a place higher than the fir, but nephews could not be
 17447 seated higher (upstream) than their maternal uncles (and this is why the
 17448 larch became deciduous).' (08-saCW)

15.2.7 Goal

17450 Verbs taking the translocative prefix very often appear with a locative phrase
 17451 (adverb, noun in the absolute or locative case and/or a locative relator noun)
 17452 expressing the goal of the motion, which at the same time corresponds to the
 17453 location where the action takes place, as for instance in (204). The locative *ri* is
 17454 particularly common to express the goal of an AM-prefix verb (see also for
 17455 instance 197 and 198 in §15.2.5 and 199 in §15.2.6 above).

- 17456 (204) <*guanzi*> *uu-ŋguu ri c-tx-rundzyts^{hi}-j.*
 restaurant 3SG.POSS-in LOC TRAL-AOR-east-1PL
 'We went to a restaurant and ate there.' (2010-1, 13)

¹⁶In the context of nephews and uncles, the upstream-downstream dimension here refers to the relative position of the adult males on the seating position called *kʰyčkʰyr* (§15.1.4.4) in the traditional society.

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17458 Even if it is not present in the same clause as the verb with the translocative,
 17459 the goal generally appears in previous clauses. For instance in (205), the verb
 17460 *c-tu-βzduu-nuu* ‘they (went and) collected it there’ is not directly preceded by the
 17461 goal, but it shares the goal *sunguu* ‘in the forest’ of the motion verb *ce* ‘go’.

- 17462 (205) *turme kui-xtci* *nunutara spikuku zo* *sunguu ju-ce-nuu tce*,
 people SBJ:PCP-be.small DEM:PL every.day EMPH forest IPFV-go-PL LNK
 17463 *icqʰa nuu, tsʰitsuku z-nui-car-nuu* *pjy-ηu tce, χsxr ra*
 FILLER DEM whatever TRAL-IPFV-search-PL IFR.IPFV-be LNK gold PL
 17464 *c-tu-βzdui-nuu* *pjy-ηu*.
 TRAL-IPFV-collect-PL IFR.IPFV-be
 17465 ‘The dwarfs went everyday into the forest, searched around and
 17466 collected gold there.’ (140504 baixuegongzhu-zh, 98-99)

17467 Verbs with the cislocative, on the other hand, are more rarely used with an
 17468 overt goal. As an example, the verb *ndza* ‘eat’ appears 7 times in the corpus with
 17469 the translocative, and 16 times with the cislocative. The goal is explicit with the
 17470 translocative (either in the same clause or in the previous clause) in 6 times out
 17471 of 7 (the only exception being 206; note that here the goal can be understood as
 17472 the nest of the eagle), whereas it is overt in only 4 of the 16 examples with the
 17473 translocative.

- 17474 (206) *qaliau kui, [...] kui-myku tce tce ui-tʰob nuu tce*
 eagle ERG SBJ:PCP-be.first LNK LNK 3SG.POSS-ground DEM LOC
 17475 *pjuu-nyvarphvβ tce pjuu-sat, tce nuu koymuz ny*
 IPFV-hit.with.wings LNK IPFV-kill LNK DEM only.after LNK
 17476 *cʰui-nuu-tsum tce c-tu-ndze*
 IPFV:DOWNSTREAM-VERT-take.away LNK TRAL-IPFV-eat[III]
 17477 *nui-ra ma,*
 SENS-be.needed LNK
 17478 ‘The eagle, (in the case of animals that are too big), it has to kill them by
 17479 hitting them with its wings, and then take them away and eat them.’
 17480 (50819 RarphAB, 4-5)

17481 The reason for the more common absence of locative phrases with the cisloca-
 17482 tive, as in (207), is because in the case of motion towards the deictic center, the
 17483 goal can generally be inferred on the basis of the context: it is most often either
 17484 the current location, or the house of either the speaker or the addressee.

- 17485 (207) *jaʒm̥ydzobzdoʂ nuu kur qajua ra tu-ndze ma tv-ryku*
 bird.sp DEM ERG bug PL IPFV-eat[III] LNK INDEF.POSS-crops
 17486 *yuu-tu-ndze mx-ŋgryl*
 CISL-IPFV-eat NEG-be.usually.the.case
 17487 ‘The bird *jaʒm̥ydzobzdoʂ* eats bugs, it does not come and eat crops.’
 17488 (24-ZmbrWpGa, 131)

17489 The examples above illustrate the most typical uses of the AM prefixes. How-
 17490 ever, the translocative can also be used in cases where the goal is unspecified
 17491 and not recoverable from the context, simply as a way to indicate that the action
 17492 takes place at a distance from the deictic center. In (208) for instance, the pres-
 17493 ence of the translocative implies that the action did not take place immediately
 17494 near the house, but that the subject had to look for the badgers (see also 190 in
 17495 §15.2.3).

- 17496 (208) *ji-me nuu kui βyuz ɻnuuz zo c-pjy-sat.*
 1PL.POSS-daughter DEM ERG badger two EMPH TRAL-IFR-kill
 17497 ‘Our daughter-in-law went (to look for badgers) and killed two badgers.’
 17498 (27-spjaNkW, 111)

17499 The exact location of the event is left vague, as shown by (209), a comment on
 17500 (208).

- 17501 (209) *nunuu ɻotcu ɻu, kui-χsyl kui-me kui-fse*
 DEM where be:FACT SBJ:PCP-be.clear SBJ:PCP-exist SBJ:PCP-be.like
 17502 *ɻuu-cti, “jo-ce tce pjy-sat” tu-kui-ti ɻuu-ɻu.*
 SENS-be.AFF IFR-go LNK IFR-kill IPFV-GENR-say SENS-be
 17503 ‘It is like it is unclear where it is, it means ‘she went (somewhere) and
 17504 killed them.’ (explanation of 208).

17505 15.2.8 Echo phenomena

17506 Previous literature on AM has reported the existence of ‘echo phenomena’ in the
 17507 use of AM markers (Wilkins 1991: 251, Vuillermet 2012: 681–683, Rose 2015: 128–
 17508 130, Guillaume 2016: 11), namely that the same motion event can be expressed by
 17509 more than one AM marker. This phenomenon is common in Japhug narratives.
 17510 Two subtypes of AM echo can be distinguished: motion verb with redundant AM,
 17511 and multiple AM marking.

15.2.8.1 Motion verb with redundant AM

17513 In examples such as (210), (211) and (212), a motion verb is followed by clause
 17514 containing a verb with an AM prefix with the same deixis: translocative after *ce*
 17515 ‘go’ (in the Aorist form *ty-ari* in 210) and cislocative after *yi* ‘come’, respectively. It
 17516 is however clear from the context, in all of these examples, that only one motion
 17517 event took place, and that the AM marker could be dispensed with.

- 17518 (210) zgoku *ty-ari* *n̥y*, ‘hehe a-zi *ra*
 mountaintop AOR:UP-go[II] LNK INTERJ 1SG.POSS-lady PL
 17519 *cʰy-tui-nui-rryfit-nui* *máj-tui-nui-suχsyl-nui*’
 IFR-2-AUTO-have.a.child-PL NEG:SENS-2-AUTO-realize-PL
 17520 *c-ta-tut* *nui-ŋu*
 TRAL-AOR:3→3'-say[II] SENS-be
 17521 ‘He went up the mountain top and said: ‘My lady, you had a child and
 17522 did not notice it.’ (2003 Kunbzang, 118)

17523 The motion verb and the verb with AM are not necessarily adjacent, as in (210)
 17524 where they are separated by a complement clause, but AM echo is common when
 17525 the AM-marked verb directly follows the motion verb, with an intervening linker
 17526 such as *tce* (as in 211) or more rarely with parataxis (as in 212).

- 17527 (211) *tcʰi* *uu-taŋ* *to-ce* *tce* *c-ty-ru*
 stairs 3SG.POSS-on IFR:UP-go LNK TRAL-AOR:UP-look
 17528 ‘He went up the stairs and looked up.’ (08-kWqhi, 18)
- 17529 (212) *kʰa* *mu-pui-ryzi* *tce tce, ftcar* *nui wuma zo* *βyuz*
 house NEG-PST.IPFV-stay LNK LNK summer DEM really EMPH badger
 17530 *pjy-ruŋŋwŋyn* *tce maka,* *kumtʰob* *ra kumy ju-yi*
 IFR.IPFV-cause.damage LNK completely threshold PL also IPFV-come
 17531 *yui-nui-slob* *pjy-ŋu*.
 CISL-IPFV-dig.up IFR.IPFV-be
 17532 ‘He was not at home, and badgers were causing a lot of damage that
 17533 summer, they came and even dug up the threshold of the house.’
 17534 (27-spjaNkW, 107)

17535 Since, with some exceptions, verbs taking AM prefix do not indicate the direc-
 17536 tion of the motion using their orientation preverbs (§15.2.3), this echo construc-
 17537 tion makes it possible to indicate the orientation on the motion verb (for instance,

17538 UPWARDS in 210, 211 and 213) while keeping that on the AM-taking verb, some-
 17539 thing which would neither be possible with only AM or with a purposive motion
 17540 verb construction (§15.2.10, §16.1.1.6). Specifying both orientations can be infor-
 17541 mative when the other verb is compatible with more than one orientation, as il-
 17542 lustrated by the contrast between (211) and (213) with the orientations UPWARDS
 17543 and DOWNWARDS on the AM-taking verb *ru* ‘look’, respectively. In principle, all
 17544 7 × 7 theoretical combinations would be possible with this pair of verbs.

- 17545 (213) *ty-tcuu nuu to-ce tce c-pjy-ru ri,*
 INDEF.POSS-son DEM IFR:UP-go LNK TRAL-AOR:DOWN-look LNK
 17546 ‘The boy went up and looked down.’ (2012 Norbzang, 57)

17547 Echo AM is however completely optional; in (214) for instance, even though
 17548 the verbs *ku-ryzi* and *pjuu-ru*, share the same subject as *to-ce*, they lack the transloca-
 17549 tive.¹⁷

- 17550 (214) *ci nuu kuu tṣʰa ko-ta, ci numuu suku nūtcu*
 one DEM ERG tea IFR-put one DEM treetop DEM:LOC
 17551 *kuu-nūtsuwa jo-ce. [...] tce numuu suku tce to-ce tce*
 SBJ:PCP-stand.guard IFR:UP-go LNK DEM treetop LOC IFR:UP-go LNK
 17552 *ku-ryzi pjy-ŋu ri, tceendyre pjuu-ru tce, u-tṣʰa nuu*
 IPFV-stay IFR.IPFV-be LNK LNK IPFV-look LNK 3SG.POSS-tea DEM
 17553 *to-k-ṛla-ci tce mbuz pjy-ŋu tce*
 IFR-PEG-boil-PEG LNK overflow:FACT IFR.IPFV-be LNK
 17554 ‘One (of the two men) prepared tea, the other one went up the tree to
 17555 stand guard. He went up, and as he was staying there, he saw (down
 17556 there) that the tea had boiled and was about to boil over.’ (26-tAGe, 7)

17557 Echo can also occur between a manipulation verb and an AM prefix, as in (215)
 17558 (see also 200, §15.2.6).

- 17559 (215) *nūnuu tcʰemypuu nūnuu jy-tsuum tce c-puu-sat*
 DEM girl DEM IMP-take.away LNK TRAL-IMP-kill
 17560 *ra*
 be.needed:FACT
 17561 ‘Take this girl (to the forest) and kill her.’ (140504 baixuegongzhu-zh, 39)

¹⁷Note that in this example the anaphora could be potentially ambiguous, and that adding the translocative on these verbs could have contributed to disambiguating the sentence.

17562 15.2.8.2 Multiple AM marking

17563 The second type of AM echo construction is found when two (or more) verbs are
 17564 redundantly prefixed with the same AM marker, for instance the cislocative *yuu*-
 17565 in (216), though only a single motion event is supposed to have taken place.

- 17566 (216) *tce a-k^ha* *ra yuu-ta-ryrobruz*, *a-mgo* *ra*
 LNK 1SG.POSS-house PL CISL-AOR:3→3'-tidy 1SG.POSS-food PL
 17567 *yuu-ta-βzu* *ηu* *ci*
 CISL-AOR:3→3'-make be:FACT QU
 17568 ‘Is it (the neighbour’s wife who took pity on me) and came and tidied
 17569 my house and made food for me?’ (150827 tianluo-zh, 76)

17570 AM echo is required in serial verb constructions (Jacques 2016a: 253–255, §25.4.1),
 17571 as shown by (217) and (218), where the pairs of verbs *ç-tu-ste* / *ç-ku-nurtçe* and *z-*
 17572 *ju-su-mts^hyt* / *z-ju-ski* share the same person (3→3'), TAM (imperfective) and AM
 17573 (translocative) markers.

- 17574 (217) *ci ci uu-mi* *kuu icq^ha*, *lulul yuu uu-mi* *nura*
 one one 3SG.POSS-foot ERG FILLER cat GEN 3SG.POSS-foot DEM:PL
 17575 *z-nur-z-nys^hyz.* *kura* *c-tu-ste* *tce*
 TRAL-IPFV-CAUS-bump DEM:PROX:PL TRAL-IPFV-do.like[III] LNK
 17576 *ç-ku-nurtçe* *ra pjx-ηu.*
 TRAL-IPFV-tease[III] PL IFR.IPfv-be
 17577 ‘(The mouse) sometimes went and touched the cat’s legs with its leg, it
 17578 (went and) teased (the cat) like that.’ (150902 dashu-zh, 31)

- 17579 (218) *uu-lo_i* *uu-ηgwi* *ri z-ju-su-mts^hyt* *zo*
 3SG.POSS-nest 3SG.POSS-inside LOC TRAL-IPFV-CAUS-be.full EMPH
 17580 *z-ju-ski*
 TRAL-IPFV-bury[III]
 17581 ‘(The mole)_i goes to its nest_j and buries (so much of the food_k it_i has
 17582 collected that it_i) fills it_j up.’ (28-qapar, 172)

17583 However, not all adjacent verb pairs sharing the same AM markers are neces-
 17584 sarily cases of AM echo. Repetition of an AM prefix can also refer to different
 17585 motion events. In (219) for instance, the first translocative prefix on *ç-tu-nurdo_k*
 17586 refers to the motion of the animal to the place where the walnut tree is found,
 17587 and the second one on *z-ju-ski* to the motion back to its nest. The translocative
 17588 appears in both cases because both places are away from the deictic center (peo-
 17589 ple’s houses), and there is no ambiguity that the two places are distinct.

- 17590 (219) *zngulob pui-kur-ŋgra nura*
 walnut AOR-SBJ:PCP-ACAUS:cause.to.fall DEM:PL
c-tu-nurdoš qʰe, nura z-ju-ski.
 TRAL-IPFV-collect.one.by.one LNK DEM:PL TRAL-IPFV-bury[III]
 'It goes and collects the walnuts that have fallen (on the ground) one by
 17593 one, and goes (to its nest) and buries them (there).' (28-qapar, 181)

15.2.9 The verb *ru* 'fetch, bring'

17595 The manipulation verb *ru* 'fetch, bring' (homophonous with the semi-transitive
 17596 *ru* 'look') is peculiar, as it generally requires the use of AM prefixes (with very
 17597 few counterexamples, see below), a feature shared with Situ (§15.2.1).

17598 With the translocative, the verb *ru* means 'go to *X* and bring *Y* here', expressing
 17599 two motion events (§15.2.5): first, a trip away from the present location (to look
 17600 for an object), and second, the way back to the point of departure (bringing the
 17601 object). The translocative refers to the *first* motion event. On the other hand, the
 17602 orientation preverb encodes the direction of the way back to the deictic center,
 17603 as shown by (220): the first trip (to the bottom of the ocean) has the DOWNWARDS
 17604 orientation, indicated by the prefix on the first verb *pui-ari*, while the second one
 17605 on *ru* has the opposite orientation UPWARDS.

- 17606 (220) *pui-ari ndyre juyi nu c-ta-ru pui-ŋu.*
 AOR:DOWN-go[II] LNK book DEM TRAL-AOR:UP:3→3'-bring SENS-be
 17607 'He went down (to the bottom of the ocean) and brought up the sutra.'
 17608 (2005 Norbzang, 236)

17609 Locative phrases/adverbs or the locative interrogative pronoun *ŋotcu* 'where'
 17610 (§6.5.4), when occurring with *ru*, refer to the destination of the first motion event
 17611 (the place where the object was originally/is still found), not the destination of the
 17612 trip back, as illustrated by (221) and (222). In (222), the destination of the first trip
 17613 (UPWARDS) is the opposite orientation as that found on the verb (DOWNWARDS),
 17614 confirming what has been observed in (220) above.

- 17615 (221) *kuki sylanpʰyn ki nrzo ŋotcu z-jy-tua-ru-t*
 DEM.PROX basin DEM.PROX 2SG where TRAL-AOR-2-bring-PST:TR
 17616 *ŋu?*
 be:FACT
 17617 'Where did you get this washbasin from?' (150831 jubaopen-zh, 138)

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- 17618 (222) *atu t̪y-mt^hum c-puu-re*
 up.there INDEF.POSS-meat TRAL-IMP:DOWN-bring[III]
 17619 ‘Bring (down) the meat from up there.’ (meimeidegushi, 204)

17620 Similarly, the person pronouncing (223) was going towards the east to fetch
 17621 the key; the orientation WESTWARDS on the verb indicates the orientation of the
 17622 way back to the current location.

- 17623 (223) *sycu z-nui-re-a*
 key TRAL-IPFV:WEST-bring[III]-1SG
 17624 ‘I will fetch the key (over there, towards east).’ (heard in context, 2014)

17625 With the cislocative, the meaning of *ru* can be rather translated as ‘come (to
 17626 the current deictic center) and take X away’, as in (224) and (225); as with the
 17627 translocative, two motion events take place (§15.2.5), but their relationship to the
 17628 deictic center is reversed: the first trip is from some place to the present location,
 17629 and the second trip is back to that original place.

- 17630 (224) *tha qalias nui kui a-rjiti yui-nui-re*
 later eagle DEM ERG 1SG.POSS-child CISL-AUTO-bring[III]
 17631 ‘The eagle will come and take my child away.’ (140427 laoying mao he
 17632 yezhu-zh, 47)

17633 The orientation preverb, when present, refers to the motion of the second trip
 17634 away from the deictic center. For instance, in (225), the two people who are sub-
 17635 jects of the verb *yui-nui-ru-ndzi* (with westwards orientation *nui-*) came from their
 17636 houses in a place called *tulu* to another location called *taṣrdo* to take stones (both
 17637 in Kamnyu village).

- 17638 (225) *kutcu zo rdystar yui-nui-ru-ndzi izora yui ra*
 here EMPH stone CISL-IPFV:WEST-bring-DU 1PL GEN be.needed:FACT
 17639 *mr-ŋgryl uu-mas ma*
 NEG-be.usually.the.case QU-not.be:FACT LNK
 17640 ‘They come here to take stones away, as if we did not need them.’
 17641 (conversation, 14-05-10)

17642 As shown by (226) (a few sentences before 225), this trip is oriented from west
 17643 to east; having taken the stones in *taṣrdo* (in the east), the two referents go back
 17644 home to *tulu* (westwards).

- 17645 (226) *tcekuu tabrdo ra ky-ye-ndzi*

east TOPO PL AOR:EAST-come[II]-DU

17646 ‘They came to Tagrdo (and looked for stones).’ (conversation, 14-05-10)

17647 The examples from (220) to (225) discussed above show that regardless of the
 17648 AM prefix, the transitive verb *ru* expresses a two-way motion event: first from
 17649 point *A* to point *B*, where an object is retrieved, and then back to *A* with the
 17650 object. The AM prefix always indicate the deixis of the first trip (either away or
 17651 towards the deictic center), and the orientation preverb encodes the direction of
 17652 the second trip, whose deixis is the opposite of that of the first trip (§15.2.5).

17653 The manipulation *ru* ‘fetch, bring’ passes all transitivity tests (§14.3.1), for in-
 17654 stance C-type orientation preverbs (220), the past suffix -*t* (221) and Stem III al-
 17655 ternation. These tests are generally sufficient to distinguish it from the semi-
 17656 transitive *ru* ‘look’, but there are still a few ambiguous cases, in particular in the
 17657 Inferential, where neither stem alternation nor prefix alternation reveals the tran-
 17658 sitivity difference. For instance, the surface form *z-lo-ru* can either correspond to
 17659 the transitive verb ‘she went down(stream) and brought it up(stream)’ as in (227)
 17660 or to the translocative of the semi-transitive verb ‘he went there and looked up-
 17661 stream’ as in (228).

- 17662 (227) *tc^heeme nuu kuu popo to-ndo tce, tur-ci*

girl DEM ERG earthenware IFR-take LNK INDEF.POSS-water

17663 *z-lo-ru ri,*

TRAL-IFR:UPSTREAM-bring LNK

17664 ‘The woman took an earthenware and brought water.’ (Gesar, 328)

- 17665 (228) *z-lo-ru ri ci ra muu-lo-cq^hlyt-nuu*

TRAL-IFR:UPSTREAM-look LNK INDEF PL NEG-IFR:UPSTREAM-disappear-PL

17666 ‘He went there and had a look up there, but the other ones had not (yet)
 17667 disappeared.’ (tWJo 2005, 74)

17668 The transitive verb *ru* almost always occurs with AM prefixes, even its in-
 17669 finitive form *cuu-ky-ru* as in (229), or its participles as in (230) (for the presence
 17670 of a subject participle instead of an infinitive in their complement clause, see
 17671 §16.1.1.6).

- 17672 (229) *tcendyre [tuu-ci cuu-ky-ru] nui-bjiz kuu-yi*

LNK INDEF.POSS-water TRAL-INF-bring 3PL.POSS-wish SBJ:PCP-come

17673 *maka zo pjy-me*

at.all EMPH IFR.IPFV-not.exist

17674 ‘None of them wanted to fetch water (anymore).’ (150830 san ge

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heshang-zh, 137)

- 17676 (230) [kuuki χsyr pyxtciu ki cw-ku-ru] cw
DEM.PROX gold bird DEM.PROX TRAL-SBJ:PCP-bring who

17677 puu-ku-cha nuu a-sci rjylp*u* c^huu-ta-su-ndo-nuu
AOR-SBJ:PCP-can DEM 1SG.POSS-instead king IPFV-1→2-CAUS-take-PL

17678 *ŋu*
be:FACT

17679 ‘Whoever among you succeeds in finding and bringing this golden bird
here, I will give him the throne.’ (qachGa2012, 24)

17680

However, in the purposive motion verb construction with *ce* 'go' and *yi* 'come' (§16.1.1.6, §15.2.10), the subject participle *u-ku-ru* is used without an AM marker, as in (231), as part of a more general constraint against AM prefixes in this construction (§15.2.3).

- 17685 (231) *lo-ce-nuu* *tce, nimawozyr nuu staslu* *pjy-ηu*
 IFR:UPSTREAM-go-PL LNK ANTHR DEM year.of.the.tiger IFR.IPFV-be
 17686 *tce uu-kui-ru* *lo-ce-nuu,*
 LNK 3SG.POSS-SBJ:PCP-bring IFR:UPSTREAM-go-PL
 17687 ‘They went up there, Nyima ’Odzer was born the year of the tiger and
 17688 they went to take him (downstream).’ (nyima2002, 89)

17689 Example (232) could appear to be a counterexample, but here the phrase *tuci munuu u-yuu-kuu-nuu-ru* is better analyzed as a prenominal participial subject
17690 relative clause (§23.4.2) rather than a purposive complement. Note the presence
17691 of the filler *nykinu* and of a pause of hesitation before the following verb *jy-ye-nu*
17692 ‘they came’.

- 17694 (232) [tua-ci nunu u-yui-kui-nui-ru] turme ra,
INDEF.POSS-water DEM 3SG.POSS-CISL-SBJ:PCP-AUTO-bring people PL

17695 n̄kinu, j̄-ye-nui tce, nunu si u-pa nutcu, spos
FILLER AOR-come[II] LNK DEM tree 3SG.POSS-under DEM.LOC incense

17696 tu-su-zwyr-nui,
IPFV-CAUS-burn-PL

17697 'Whenever people came to take water (from the well), (the demon)
17698 forced them to burn incense under the tree.' (140512 abide he mogui-zh,
17699 12)

15.2.10 Associated motion vs. motion verb construction

To express the meaning of motion prior to an action, associated motion prefixes are nearly two times as common as corresponding motion verb constructions (henceforth MVC) in the Japhug corpus. There is however a clear semantic difference between the two constructions, which was briefly described in Jacques (2013b), but is presented here in more detail.

AM and MVC differ from each other in that in the former, the completion of both motion event and verbal action is presupposed, whereas in the case of the latter, the two can be separated. This difference in degree of event integration is most conspicuous in Aorist forms, and can be observed in four types of constructions: concessives (with negation of the verbal action), interrogatives, conditionals and complement clauses.

Another difference between MVC and AM is the fact that while MVC require a volitional verb in the purposive complement, there is no such requirement for the AM markers.

15.2.10.1 Concessive

A MVC with the motion verb in perfective form can be followed by a clause negating the purposive action, as in (233). In this example, only the motion is realized, while the action expressed by the verb *rtoʂ* ‘look’ could not be accomplished.

- (233) *nʂ-kuu-rtoʂ jʂ-ye-a ri, mui-nuu-atuy-tci,*
 1SG.POSS-SBJ:PCP-see AOR-come[II]-1SG LNK NEG-AOR-meet-1DU
 mui-puʂ-ta-mto.
 NEG-AOR-1→2-see
 ‘I came to see you but I did not see you.’

With the corresponding AM verb form *yuu-jʂ-ta-rtoʂ* ‘I came and saw you’, negating the action of the verb is self-contradictory and nonsensical, and a sentence such as (234) is incorrect.

- (234) *†yuu-jʂ-ta-rtoʂ ri mui-puʂ-ta-mto*
 CISL-AOR-1→2-look LNK NEG-AOR-1→2-see
 Intended meaning: ‘I came to see you but I did not see you.’

Additional minimal pairs of the same type are presented in Jacques (2013b: 202–203).

Example (235) from a conversation illustrates this property also with a manipulative verb *yut* ‘bring’: the action of the essive participial complement *kʂ-ntsye*

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17731 ‘sell’ (§24.4.2.2) is negated in the following clause (with an abilitative *su-*, see
17732 §19.3).

- 17733 (235) *snyymmts^bu kuu kx-ntsye c^hy-yuit ri*
ANTHR ERG OBJ:PCP-sell IFR:DOWNTSTREAM-bring LNK
17734 *múaj-su-i-ntsye ndyre,*
NEG:SENS-ABIL-sell LNK
17735 ‘Bsod.nams.mtsho brought them (to Mbarkham) to sell, but could not
17736 sell it.’ (conversation, 14.05.10)

15.2.10.2 Interrogative

17738 The difference between MVC and AM in interrogatives can be illustrated by the
17739 minimal pair (236) and (237).

17740 In interrogative, MVCs are required to express meanings such as ‘What/who
17741 have you come/gone to X’, as in example (236), an example which occurs nine
17742 times in the corpus.

17743 Example (236) presupposes that the addressee has not done anything yet, while
17744 (237) with associated motion can only be used if the presupposition is that the
17745 action has already taken place, requiring a different translation.

- 17746 (236) *tc^hi uu-kui-pa jy-tui-ye?*
what 3SG.POSS-do AOR-2-come[II]
17747 ‘What did you come to do?’ (nine examples in the corpus)
- 17748 (237) *tc^hi yuu-tr-tui-pa-t*
what CISL-AOR-2-eat-PST:TR
17749 ‘What did you do upon coming here?’ (elicited)

17750 Similarly, in the interrogative clause in (238), the presence of the translocative
17751 on *c-pui-tuu-ry-tṣuβ* implies that the sewing action has taken place.

- 17752 (238) *cuu ra nuu-k^ha tce c-pui-tuu-ry-tṣuβ tr-ti*
who PL 3PL.POSS-house LOC TRAL-AOR-2-APASS-sew IMP-say
17753 *ra*
be.needed:FACT
17754 ‘To whose house have you gone and done some sewing, say it.’ (140512
17755 alibaba-zh, 164)

17756 This is not a universal property of AM markers. In languages such as Nanai,
17757 AM markers can be used even when the presupposition is that only the motion
17758 event has been completed (Stoyanova 2016).

17759 15.2.10.3 Conditional

17760 The presuppositional difference between a MVC and AM is also perceptible in
 17761 the protasis of conditional clauses.

17762 With a MVC in the protasis as in (239), there is no presupposition that the
 17763 verbal action took place, and the motion event alone constitutes a condition to
 17764 the state of affair described in the apodosis.

- 17765 (239) *ny-wa u-kui-rtoꝝ mu~my-jy-tui-ye ny*
 2SG.POSS-father 3SG.POSS-SBJ:PCP-look COND~NEG-AOR-2-come[II] LNK
 17766 *aꝝo mur-pui-kui-mto-a.*
 1SG NEG-AOR-2→1-1SG

17767 ‘If you had not come to see your father, you would not have seen me.’
 17768 (you saw me, but your father was not here)

17769 By contrast, with AM, the verbal action necessarily took place, as in example
 17770 (240).

- 17771 (240) *ny-wa mu~my-yuu-jy-tui-rtoꝝ ny pui-syzduxpa*
 2SG.POSS-father COND~NEG-CISL-AOR-2-look LNK PST.IPFV-be.pitiful
 17772 ‘If you had not come and seen your father, he would have felt sorry.’ (but
 17773 you did see him, so he does not feel sorry)

17774 15.2.10.4 Complement clauses

17775 In complement clauses, verbs with AM prefixes are attested, and complement-
 17776 taking verbs always have scope over both the action of the verb and motion
 17777 event.

17778 The combination of modal verbs such as *cʰa* ‘can’ with double negation, with the
 17779 specific meaning ‘cannot help’, §13.3, have scope over both the motion event and
 17780 the verbal action.

17781 This is illustrated in example (241), which is taken from a passage in a story
 17782 where the king scolded a small child, who had just returned from a mission he
 17783 himself sent him on, because the child did not come to greet him first upon his
 17784 return. Example (241) shows the answer the child uses to justify why he went to
 17785 see his mother first before greeting the king. From context it is clear that both
 17786 the motion event (to his mother’s house, explaining the child’s failure to go to
 17787 see the king) and the action ‘drink milk’ (the reason for that motion event) are
 17788 equally important to the plot and inseparable.

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- 17789 (241) *tua-nuu* *u-kua-ts^{hi}* *pua-cti-a* *tce*,
 INDEF.POSS-breast 3SG.POSS-SBJ:PCP-drink SENS-be.AFF-1SG LNK
 17790 *jy-azyut-a* *tce, tua-nuu* *ci* *my-cua-ky-ts^{hi}* *nuu*
 AOR-arrive-1SG LNK INDEF.POSS-breast INDEF NEG-TRAL-INF-drink DEM
 17791 *máj-c^ha-a*
 NEG:SENS-can-1SG
 17792 ‘I am (a toddler) who (still) drinks (his mother’s) milk, when I arrived, I
 17793 could not help but go and drink milk.’ (Norbzang, 262)

17794 In (242), the negated modal verb has also on the action of both the main verb
 17795 and the motion event – the guards would prevent the main character not only
 17796 from stealing, but also from going to place where the object to be stolen is found.

- 17797 (242) *bumar* *χstu-tṣk^har* *kua* *pua-yz-nyk^har-nuu* *cti* *tce*,
 soldier three-rounds ERG SENS-PROG-surround-PL be.AFF:FACT LNK
 17798 *cua-ky-murkuu* *my-tar-c^ha*
 TRAL-INF-steal NEG-2-can:FACT
 17799 ‘Three rounds of soldiers will be surrounding it, you will not be able to
 17800 (go there and) steal it.’ (2003qachga, 55)

17801 Examples (243) and (244) illustrate the scope of aspectual auxiliary verbs (here
 17802 *atsu* ‘have the time to’ and *mda* ‘be time to’) on both motion event and verbal
 17803 action. In (244), note that the infinitive form with AM *cua-ky-mtc^hot* ‘go and make
 17804 offerings’ translates the Chinese festival 清明节 <qīngmíngjié> ‘Tomb-Sweeping
 17805 Day’ (using a verb borrowed from Tibetan མཚོ ཡོད ‘make offerings’). There
 17806 was no motion verb in the original text.

- 17807 (243) *q^he* *poturzi kua ny-kum* *yua-ky-cua* *my-atsu* *ma*
 LNK ANTHR ERG 2SG.POSS-door CISL-INF-open NEG-have.the.time.to LNK
 17808 ‘Bod.rje does not have time to come and open the door for you.’ (2010
 17809 meimei de gushi, 21)
- 17810 (244) *tursa cua-ky-mtc^hot* *to-mdā* *pua-ηu*
 grave TRAL-INF-make.offerings IFR-be.the.time SENS-be
 17811 ‘It was the time to (go and) make offerings for the graves.’ (160630
 17812 abao-zh, 70)

17813 The same scopal effect also applies to verbs with AM in complement clauses
 17814 selected by a verb in the protasis, as in (245) and (246): the realization of the
 17815 verbal action (in addition to that of the motion event) belongs to the condition.

- 17816 (245) *cui-ky-ru mur~my-puu-tuu-c^ha nyu ny ny-srym*
 TRAL-INF-bring COND~NEG-AOR-2-can be:FACT LNK 1SG.POSS-root
 17817 *ny-srob lxt-i*
 1SG.POSS-life throw:FACT-1PL
 17818 ‘If you do not succeed in going and bringing it here, we will destroy your
 17819 root and your life.’ (Norbzang, 10)
- 17820 (246) *nyzo cui-ky-murkuu a-puu-tuu-c^ha ny azo c^huu-sui-jyat-a*
 2SG TRAL-INF-steal IRR-IPFV-2-can LNK 1SG IPFV-CAUS-go.back-1SG
 17821 *jxy*
 be.agreed:FACT
 17822 ‘If you succeed in going and stealing it, I can make him to go back there.’
 17823 (02-montagnes-kamnyu, 46)

17824 By contrast, in (247), in the case of the infinitival complement *kui-ryma ky-ce*
 17825 ‘go to work’ with a purposive clause *kui-ryma* (§24.4.2.1), the main verb *mda* ‘be
 17826 time to’ only has scope over the motion event expressed by the verb *ce* ‘go’ – the
 17827 time that is indicated by the stars refers to the beginning of the journey to work,
 17828 not the start of the work itself. Compare this example in particular with (244)
 17829 above, with the same auxiliary verb.

- 17830 (247) *tce kucungui tce tuuts^hot puu-me tce numuu*
 LNK long.ago LNK clock PST.IPFV-not.exist LNK DEM
 17831 *c^hui-tos lu-cq^hlyt naura*
 IPFV:DOWNSTREAM-come.out IPFV:UPSTREAM-disappear DEM:PL
 17832 *ce-tu-kur-ru tce, numuu ky-ryru mda*
 TRAL-IPFV:up-GENR:S/O-look LNK DEM INF-get.up be.the.time:FACT
 17833 *my-md^ha c^hondyre kui-ryma ky-ce mda*
 NEG-be.time:FACT COMIT SBJ:PCP-work INF-go be.time:FACT
 17834 *my-md^ha nutcu ce-tu-kur-ru*
 NEG-be.time:FACT DEM:LOC TRAL-IPFV:up-GENR:S/O-look
 17835 *puu-ŋgryl*
 PST.IPFV-be.usually.the.case
 17836 ‘In former times, there were no clocks, and people used to go and watch
 17837 when (these stars) came out or disappeared (to find out) whether it was
 17838 time to get up or go to work.’ (29-LAntshAm, 66)

15.2.10.5 Volitionality and controllability

An additional difference between AM and MVC has to do with volitionality and/or controllability. In the case of an MVC, the verb in the purposive clause, whose action follows the motion event, is always necessarily volitional and controllable. By contrast, in the case of AM, it is possible to find examples where the verbal action expresses a non-controllable event.

For example in (248) and (249), the verbs *ɛ-pjy̥-mto* ‘he (went and) saw/found it there’ (with verb echo, § 15.2.8) and *ɛ-pu̥-rndu-tçɪ* ‘we (went and) obtained it’ express the action of finding something or someone, whose outcome is not controllable. Note that there are no examples of the non-volitional verb *mto* ‘see’ with the MVC in the corpus (the volitional *rto̥z* ‘see, look’ or *ru* ‘look’ occur instead).

- (248) *nucimuma zo tu-ci ui-ηgwu pjy-ce q^he*
immediately EMPH INDEF.POSS-water 3SG.POSS-inside IFR:DOWN-go LNK
icq^ha tycime kui ui-sycwu
the.aforementioned lady ERG 3SG.POSS-key
pui-kv-nui-cluy nui c-pjy-mto.
AOR:DOWN-OBJ:PCP-AUTO-drop DEM TRAL-IFR-see
‘He immediately went into the water and saw there the key that the lady
had dropped by mistake.’ (140510 fengwang-zh, 118)

- (249) *χsyr pya, χsyr mbro nunura c^ho ki txcime kura tcizo*
 gold bird gold horse DEM:PL COMIT DEM.PROX girl DEM.PROX:PL 1DU
rcaṇu, wuma zo puu-zduy-tci tce, nu kóbmuz
 UNEXP:DEG really EMPH PST.IPFV-suffer-1DU LNK DEM only.then
c-puu-rndu-tci nyu
 TRAL-AOR-obtain-1DU be:FACT
 ‘We had to endure a lot of hardships before obtaining this golden bird,
 this golden horse and this girl.’ (140507 jinniao-zh, 366)

The verb *si* ‘die’ is also attested with AM as in (250), while a MVC would be clumsy in this context.¹⁸

- (250) *azo müj-c^ha-a, [...] nuš syzny a-c-puu-si-a*
 1SG NEG:SENS-can-1SG DEM COMP IRR-TRAL-PFV-die-1SG
nuš-mna
 SENS-be.better
 'I am good for nothing, I had better just (go and) die.' (1404)

¹⁸The verb form *a-ç-piu-si-a* ‘let me go and die’ translates Chinese 寻死 <xúnsì> ‘look for death’.

17865 puluomixiusi he daxiang-zh, 22)

17866 15.2.10.6 Relativizability

17867 Another difference between MVC and AM is related to the relativizability of core
 17868 arguments. In the MVC, the common subject of the motion verb and the verb of
 17869 the purposive clause (including transitive subject) can be relativized, and if overt,
 17870 the head can be internal, between the purposive clause and the nominalized mo-
 17871 tion verb, as *tx-tcui* ‘son, boy’ in (251), or occur after the whole clause.

- 17872 (251) *[[tx-mu u-kui-rto&] tx-tcui]*
 INDEF.POSS-mother 3SG.POSS-SBJ:PCP-see INDEF.POSS-son
jy-kui-yri] *nui a-bi* *ŋu*
 AOR-SBJ:PCP-go[II] DEM 1SG.POSS-younger.sibling be:FACT
 17874 ‘The boy who went to see the old lady is my brother.’ (elicited)

17875 On the other hand, when the verb of the purposive clause is transitive, it is not
 17876 possible to relativize the object. Example (252), with an overt transitive subject
 17877 *a-ki kui* is thus non-grammatical, and the phrase *u-kui-rto& jy-kui-yri tx-mu* can
 17878 only be interpreted as a subject relative ‘the old lady who went to see him’.

- 17879 (252) *†a-ki kui u-kui-rto& jy-kui-yri*
 1SG.POSS-younger.sibling ERG 3SG.POSS-SBJ:PCP-see AOR-SBJ:PCP-go[II]
tx-mu nui a-łas ŋu
 INDEF.POSS-mother DEM 1SG.POSS-MZ be:FACT
 17881 Intended meaning: ‘The old lady that my younger brother went to see is
 17882 my aunt.’

17883 The only way to build a relative clause with this meaning is to use AM prefixes.
 17884 In (253) for instance, the prenominal finite relative (a subtype that is restricted
 17885 to object or goal relativization, §23.2.2) *a-ki kui z-ja-rto&* does not contain any
 17886 additional embedded clause, and is a simple case of object relativization.

- 17887 (253) *[a-ki kui z-ja-rto&] tx-mu*
 1SG.POSS-younger.sibling ERG TRAL-AOR:3→3'-see INDEF.POSS-mother
nui a-łas ŋu
 DEM 1SG.POSS-MZ be:FACT
 17889 ‘The old lady that my younger brother went to see is my aunt.’ (elicited)

17890 The fact that by contrast (252) is not grammatical shows that relativization out
 17891 of purposive clauses is prohibited in Japhug grammar, unlike some complement
 17892 clauses (§23.5.11).

17893

16 Non-finite verbal morphology

17894 The distinction between finite and non-finite verb forms is easy to draw in Ja-
17895 phug: the former have person indexation (see chapter §14), while the latter do
17896 not. The only personal markers found on non-finite verb forms are possessive
17897 prefixes, the same set as in underived nouns (§5.1).

17898 In this chapter, I distinguish between several sub-categories of non-finite verb
17899 forms, including participles, infinitives, degree and action nominals as well as
17900 several converbs. In addition to describing the morphology of these verb forms,
17901 I also present their functions to build various types of subordinate clauses, includ-
17902 ing relative, complement and purposive clauses.

17903

16.1 Participles

17904 Japhug speakers, like Ancient Greeks, can be aptly described as φιλομέτοχοι ‘par-
17905 ticiple lovers’: Japhug and other Gyalrong languages have a rich system of partici-
17906 ples, and these non-finite forms play a central role in the syntax of the language.

17907 Participles are nominalized verb forms that keep some verbal characteristics:
17908 they can serve as predicates of subordinate clauses (relative or complement clau-
17909 ses), take TAM, polarity and associated motion marking, and preserve the verb’s
17910 argument structure.

17911 Participles differ from finite verbs in three ways. First, they cannot serve as the
17912 predicate of a main clause. Second, they are not compatible with the personal in-
17913 dexation of the intransitive and transitive conjugations (including direct/inverse
17914 marking, §14.3.2.7), and with all inflectional suffixes without exception (§11.3).¹
17915 Rather, like nouns, they can take a possessive prefix which can be coreferent with
17916 one of the arguments. Due to the general impossibility of stacking possessive pre-
17917 fixes (§5.1.1), at most only one argument can be indexed this way. Third, there
17918 are restrictions on TAM marking on participles: they have at most three forms
17919 (neutral, perfective and imperfective), and completely lack Inferential (§21.5.2),
17920 Egophoric Present (§21.3.3) or Sensory (§21.3.2) forms .

¹Japhug is identical in this regard to Tshobdun and Zbu, but crucially differs from Situ, where nominalized forms in *kə-* can bear indexation suffixes (Sun 2006a; Sun & Lin 2007).

17921 There are three participles in Japhug; the subject S/A participle in *kui-*, the
 17922 object participle in *kyr-* and the oblique participle in *sv-*.

17923 Complex participial forms, including negative, associated motion or TAM pre-
 17924 fixes are possible, as shown by example (1). However, never more than four in-
 17925 flexional prefixes are found; forms with all five prefixal slots filled (such as *tu-*
 17926 *yuu-jy-kui-qru*) are not accepted by Tshendzin.

- 17927 (1) *uu-yuu-jy-kui-qru* *ty-tcuu*
 3SG-CISL-AOR-SBJ:PCP-meet INDEF.POSS-boy

17928 ‘The boy who had come to look for her.’ (The three sisters, 231)

17929 Table 16.1 summarizes the template of participial verb forms; more details are
 17930 provided on possible and attested forms for each participle type in the following
 17931 sections.

Table 16.1: The template of participial verb forms in Japhug

-6 possessive prefix	-5 proximative	-4 negative prefix	-3 associated motion prefix	-2 TAM orientation	-1 participle prefix	Σ enlarged stem
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17932 Stem alternation is reduced in participle forms: stem III (§12.2.2.2) never occurs.
 17933 The few verbs that have an alternation between stem I and stem II (*ce* ‘go’, *yi*
 17934 ‘come’, *ti* ‘say’ and derived forms, §12.2.1), however, use stem II in subject and
 17935 object participles with perfective orientational prefixes (§15.1.1.1), in forms like *jy-kui-ye* AOR-SBJ:PCP-come[II] ‘the one who came’ or *ty-kyr-tut* AOR-OBJ:PCP-say[II]
 17936 ‘what was said’.

17938 16.1.1 Subject participles

17939 The subject participle, built by adding the prefix *kui-* to the verb stem, designates
 17940 an entity corresponding to the intransitive subject (2, §8.1.1 and §23.5.1), a pos-
 17941 sessor of the subject (§23.5.10.1), or the transitive subject (3, §8.2.2.1, §23.5.2) of
 17942 the base verb.

- 17943 (2) *kui-si*
 SBJ:PCP-die
 17944 ‘The dead one’ (many attestations)
- 17945 (3) *uu-kui-ndza*
 3SG-SBJ:PCP-eat
 17946 ‘The one who eats it.’ (many attestations)

With *a*- initial verbs the *kua-* prefix regularly merge with *a*- as *ky-*, a form which resembles an object participle. There is almost no ambiguity since all *a*- initial verbs are intransitive, §12.3). The only exception are the semi-transitive verbs in *a*-, such as *aro* ‘have’, whose subject participle *kua-yro* ‘having, the one who has’ and object participle *ky-yro* both surface as /kyro/.

The subject participle *kua-* prefix is historically related to that of object participles (§16.1.2), velar infinitives (§16.2.1) and deverbal nouns in *x-/y-* (§16.5.2), and has cognates elsewhere in the family (§16.8.1).

In this section, I discuss first morphological issues (possessive prefixes §16.1.1.3, other prefixes §16.1.1.2 and ambiguous forms §16.1.1.3), and then present the various functions of subject participles, including participial relatives (§16.1.1.4 and §16.1.1.5), complementation strategies (§16.1.1.6), as well as the case of lexicalized participles (§16.1.1.7).

Examples which could potentially be viewed as subject participles in conversational use are analyzed as *kua-* infinitives (§16.2.1.7).

16.1.1.1 Possessive prefixes on subject participles

In the case of transitive verbs, a possessive prefix coreferent with the object is obligatory when no overt object is present (3SG *wu-* in 3), and when no other prefix is added to the participle.

When another prefix (polarity, associated motion or orientation preverb) is present, the possessive prefix is optional, as shown by forms like *mr-kua-ndza* ‘the one which does not eat (it)’ in (4), as opposed to *wu-mr-kua-mto* ‘the one who does not see it’ in (5) with both possessive *wu-* and the negative prefix *mr-*.

- (4) *tx-mt^hum bja zo ma nuu ma, nyki,*
 INDEF.POSS-meat completely EMPH LNK DEM apart.from FILLER
tuijpu mr-kua-ndza ci tu tce,
 flour.based.food NEG-SBJ:PCP-eat INDEF exist:FACT LNK
 ‘There is (an animal like the mouse) which only eats meat, not food made from flour.’ (27-spjaNkW, 202-2063)

- (5) *li nuunuu kuan^y wu-kua-mto yyzu,*
 again DEM also 3SG.POSS-SBJ:PCP-see exist:SENS
wu-mr-kua-mto yyzu.
 3SG.POSS-NEG-SBJ:PCP-see exist:SENS
 ‘There are (people) who see (find) it, and people who don’t.’ (20-sWrna,
 20)

16 Non-finite verbal morphology

In the case of ditransitive verbs, the possessive prefix strictly refers to the object. With indirective verbs like *t^hu* ‘ask’, the possessive prefix is necessarily the theme, never the recipient. The form in (6) thus cannot be interpreted as meaning ‘the one who asks me (about it)’; the correct construction would be (7), with the recipient in the dative case.

(6) *a-kui-t^hu*

1SG.POSS-SBJ:PCP-ask

‘The one asking for me (in marriage).’ (elicited)

(7) *a-cki u-kui-t^hu*

1SG.POSS-DAT 3SG.POSS-SBJ:PCP-ask

‘The one who asks me about it.’

With secundative verbs (§14.4.2), the possessive prefix of the subject participle is obligatorily coreferent with the recipient, not the theme, as in (8).

(8) *nua ma ny-kui-mbi*

me

DEM apart.from 2SG.POSS-SBJ:PCP-give not.exist:FACT

‘Nobody will give you another (daughter in marriage).’ (2002 qaCpa, 57)

With intransitive verbs, including adjectival stative verbs, a possessive prefix can also be added. In the case of semi-transitive verbs (§14.2.3), the possessive can refer to the semi-object (§8.1.5), as in example (9).

(9) *nua cuŋgu tce, u-kui-rga*

pui-dyn.

DEM before LNK 3SG.POSS-SBJ:PCP-like PST.IPFV-be.many

‘Before, there used to be many people who liked it.’ (12-Zmbroko, 112)

It can also refer to the beneficiary (which is normally marked with genitive or possessive prefixes, see §5.1.1.4 and §8.2.3.2), as in (10) and (11).

(10) *kui-pe tú-wy-nyma tce li tuzo*

SBJ:PCP-be.good IPFV-INV-make LNK again GENR

tua-kui-pe tu

GENR.POSS-SBJ:PCP-be.good exist:FACT

‘If one does good things, one will also have good things.’ (140518 mao he laoshu-zh, 124)

- 18002 (11) *azo a-kur-ra* *nuara a-tx-tur-ste* *q^hendyre azo*
 1SG 1SG.POSS-SBJ:PCP-be.needed DEM:PL IRR-PFV-2-do.like[III] LNK 1SG
 18003 *nunuu, nyki, ku-nxtsi-a* *jxy*
 DEM FILLER IPFV-hide[III]-1SG be.possible:FACT
 18004 ‘If you do the things I need, I will keep it secret.’ (2014-kWLAG, 247)

18005 Since participles are also noun-like, the possessive prefixes can be real posses-
 18006 sive, and be preceded with a genitive phrase as in (12) with *nui-kuu-mna* ‘the best
 18007 among them’ = ‘their chief’ (on the verb *mna* ‘be better’, see §19.7.10).

- 18008 (12) *tcaχpa ra yui nui-kuu-mna* *nui wuma zo pju-nuryŋom.*
 bandit PL GEN 3PL.POSS-SBJ:PCP-be.better DEM really EMPH IFR-be.upset
 18009 ‘The chief of the bandits was very upset.’ (140512 alibaba-zh, 195)

18010 This construction is used as a type of superlative (§26.4.2).

18011 **16.1.1.2 Associated motion, polarity and orientation preverbs on subject
 18012 participles**

18013 Of all non-finite verb forms, subject participles allow the richest possible com-
 18014 binations of inflectional prefixes: associated motion (§15.2, example 13) below
 18015 with the translocative *ciu-*), polarity (§13.1, see 5 above) and orientation preverbs
 18016 marking TAME (§15.1.1.1) all can be prefixed.

- 18017 (13) *tceri nuara ui-cuu-kuu-p^htut* *ra kuu-tu me*
 LNK DEM:PL 3SG.POSS-TRAL-SBJ:PCP-cut PL SBJ:PCP-exist not.exist:FACT
 18018 *ma,*
 LNK
 18019 ‘But nobody goes to collect (its stalks).’ (11-paRzwamWntoR, 90)

18020 Two of the four series of orientation preverbs (§15.1.1.1) are possible with sub-
 18021 ject participles. With A-type prefixes (*tx-* UPWARDS, *pu-* DOWNWARDS etc), the
 18022 participle of dynamic verbs is perfective as *t^huu-kuu-ye* ‘the one who came’ in (14),
 18023 and takes stem II (§12.2.1). With B-type prefixes (*tu-* UPWARDS, *pju-* DOWNWARDS),
 18024 it has a habitual imperfective meaning with dynamic verbs as *ju-kuu-yi* ‘the one
 18025 who (usually) comes’ in (15).² The prefixes *nui*-and *ku-* do appear on subject par-
 18026 ticiples, but only to express imperfective: there are no Egophoric (§21.3.3) or Sen-
 18027 sory (§21.3.2) subject partiles.

²These two examples also illustrate the use of subject participles as purposive complements with the forms *uu-kuu-ntsye* and *uu-kuu-ndza* (see §16.1.1.6, §24.4.2.1).

- 18028 (14) *icq^ha qazo u-kui-ntsye*
 the.aforementioned sheep 3SG.POSS-SBJ:PCP-sell
 18029 *t^hu-kui-ye nuu u-p^he*
 AOR:DOWNTSTREAM-SBJ:PCP-come[II] DEM 3SG.POSS-DAT
 18030 ‘(He told) the person who had come to sell the sheep.’ (2003kandZislama,
 18031 212)
- 18032 (15) *uu-kui-ndza ju-kui-yi nuu pya ci nuu-ηu*
 3SG.POSS-SBJ:PCP-eat IPFV-SBJ:PCP-come DEM bird INDEF SENS-be
 18033 ‘The one who comes to eat (the fruits) is a bird.’ (2012 qachGa, 22)

18034 The participles of stative verbs with series A and B orientation preverbs have
 18035 an inchoative meaning, exactly like their finite counterpart (§21.5.1.3 and §21.2.6).
 18036 In (16) for instance, the imperfective participle *nuu-kui-jpum* from *jpum* ‘be thick’
 18037 means ‘the one which becomes thicker’, as opposed to the basic participle *kui-*
 18038 *jpum* ‘the thick one’.

- 18039 (16) *ndzu uu-ku jamar nuu-kui-jpum yyzu ny,*
 18040 chopsticks 3SG.POSS-head about IPFV-SBJ:PCP-be.thick exist:SENS SFP
 18041 *kui-wxti.*
 18042 SBJ:PCP-be.big
 ‘There are (maggots) that grow as thick as the tip of a chopstick, the big
 ones.’ (25-akWzgumba, 80)

18043 Imperfective participles of stative adjectival verbs are also can also describe
 18044 the gradient variation of a property across space rather than time. For instance,
 18045 in (17), the imperfective subject participles *ku-kui-xts^hum* and *nuu-kui-jpum* are used
 18046 not to indicate a change across time, but to describe the shape of the gourd, which
 18047 is progressively thinner towards the top and thicker towards the bottom (on the
 18048 contrast between the EASTWARDS *ku-* vs. WESTWARDS *nuu-* preverbs in this context,
 18049 see §15.1.4.3).

- 18050 (17) *tce uu-mat nuunu, uu-tas ku-kui-xts^hum,*
 18051 LNK 3SG.POSS-fruit DEM 3SG.POSS-up IPFV-SBJ:PCP-be.thin
 18052 *uu-pa nuu-kui-jpum ci c^hu-βze nuu-ηu tce,*
 18053 3SG.POSS-down IPFV-SBJ:PCP-be.thick INDEF IPFV-make[III] SENS-be LNK
 18054 *nuu <hulu> tu-syrm*i*-nuu.*
 DEM gourd IPFV-call-PL
 ‘It grows a fruit that is thinner (in diameter) on the upper part, and
 18055 thicker on the lower part, people call it ‘gourd’.’ (150825 huluwa-zh, 3)

18055 The past imperfective of stative verbs is built using the series A prefix *pu-* as
 18056 in the corresponding finite forms (§21.5.3.1). For instance, the past imperfective
 18057 participle of *ŋu* ‘be’ is *pu-kuu-ŋu* ‘the one who used to be’ (§5.7.10), as in (18).

- 18058 (18) *wzry nui cuŋgwi w-nmaŋ* *pu-kuu-ŋu* *ts^buraj nui*
 18059 3SG:GEN DEM before 3SG.POSS-husband PST.IPFV-SBJ:PCP-be ANTHR DEM
 18060 *pjx-mto*
 IFR-see

18060 ‘She saw Tshering, who used to be her husband.’ (qajdoskAt2002, 101)

18061 Most examples in the corpus have one or two prefixes, either combining a
 18062 possessive prefix with another prefix (as in 5 and 13), or combining a negative
 18063 prefix with an orientation preverb, as in (19).

- 18064 (19) *tce k^ha yui w-ndzyts^hi w-ro* *nui-kuu-ri* *nura,*
 18065 LNK house GEN 3SG.POSS-food 3SG.POSS-excess AOR-SBJ:PCP-left DEM:PL
 18066 *mui-nui-kuu-sna* *nura, nura paŋ kui bja*
 18067 NEG-AOR-SBJ:PCP-be.good DEM:PL DEM:PL pig ERG completely
 18068 *tu-ndze nui-ŋu*
 18069 IPFV-eat[III] SENS-be
 18070 ‘Food from the house that has been left over, or which is not good any
 18071 more, pigs eat all of it.’ (05-paR, 33)

18069 Subject participles with three prefixes before the participle prefix *kua-* are possi-
 18070 ble, but attestations are rare. Example (1) above shows the combination of a pos-
 18071 sessive, an associated motion and an orientation preverbs (*w-yui-jx-kuu-qru* ‘the
 18072 one who had come to meet/look for her’), and (20) below that of a possessive, a
 18073 polarity and an orientation preverbs.

- 18074 (20) *w-pjuw-kuu-nui-fkaβ* *tu,*
 18075 3SG.POSS-IPFV-SBJ:PCP-AUTO-cover exist:FACT
 18076 *w-my-pjuw-kuu-nui-fkaβ* *tu ri nui*
 18077 3SG.POSS-NEG-IPFV-SBJ:PCP-AUTO-cover exist:FACT LNK DEM
 18078 *kuu-fse tu-nui-ndza-nui cti.*
 18079 SBJ:PCP-be.like IPFV-AUTO-eat-PL be.AFF:FACT
 18080 ‘There are people who cover it (with a lid while cooking), and people who
 18081 don’t, they eat it like that.’ (23-mbrAZim, 22-23)

18079 In addition to imperfective orientation preverbs as in (20), it is possible for
 18080 subject participles to combine possessive prefixes with *perfective* orientation pre-
 18081 verbs, as in (21). Subject participles are the only non-finite forms attested with

16 Non-finite verbal morphology

18082 such a combination: the object participles do not allow combination of posses-
18083 sive and orientation preverbs (§16.1.2.1) and the oblique participles cannot take
18084 perfective orientation preverbs (§16.1.3.4).

- 18085 (21) *nunuu u-nuu-kuu-car* *u-puu-kuu-mto* *nuu yuu*
DEM 3SG.POSS-AOR-SBJ:PCP-search 3SG.POSS-AOR-SBJ:PCP-see DEM GEN
18086 *nuu-tsaj* *ma nunuu, nykinuu, u-cuu-kuu-beta* *nuu yuu*
SENS-be.fair LNK DEM FILLER 3SG.POSS-TRAL-SBJ:PCP-chase DEM GEN
18087 *múuj-tsaj*
NEG:SENS-be.fair
18088 ‘It is fair that she would (be given) to the one who looked for her and
18089 found her, not to the ones chasing her.’ (140517 buaishuohua-zh, 123)

18090 The negative prefix has the form *mu-* when occurring with a perfective orien-
18091 tation preverb as *mu-nuu-kuu-sna* ‘the one that is not good anymore’ in (19) and
18092 *mr-* when no orientation preverb is present (examples 5 and 4 above). With the
18093 imperfective orientation preverbs, the allomorph *mr-* occurs when preceded by
18094 a possessive prefix (20) and *mu-* is found when no possessive prefix is present:
18095 compare the elicited forms (22) and (23). The allomorphs of the negative prefix
18096 are not in free variation: forms such as *†uu-mu-ku-kuu-ts^{hi}i* or *†mr-ku-kuu-ts^{hi}i* would
18097 be incorrect in Kamnyu Japhug.

- 18098 (22) *uu-mr-ku-kuu-ts^{hi}i*
3SG.POSS-NEG-IPFV-SBJ:PCP-drink
18099 (23) *muu-ku-kuu-ts^{hi}i*
NEG-IPFV-SBJ:PCP-drink
18100 ‘The one who drinks it.’ (elicited)

18101 There are no constraints on the number of derivational prefixes in participial
18102 forms. The derivational prefixes are all closer to the verb root than the participle
18103 prefix *kuu-*, and thus follow it as shown by (20), where the autative *-nuu-*, the leftmost
18104 of all derivational prefixes (§11.2.2), is placed after *kuu-*.

18105 Aside from possessive, orientation, associated motion and polarity prefixes,
18106 subject participles can also receive the Proximative aspect prefix *ju-* (see 252,
18107 §21.6.2).

18108 Subject participles can undergo totalitative reduplication (§12.4.1.5, §23.3.2),
18109 which applies to the first syllable of the word, whether it is the participle *kuu-* or
18110 an orientation preverb as in (24), meaning ‘all of those who/that X’.

- 18111 (24) *tce numuu u-taʂ jur~jy-kuu-ye nuu ku-ndym*
 LNK DEM 3SG.POSS-ON TOTAL~AOR-SBJ:PCP-COME[II] DEM IPFV-TAKE[III]
 18112 *nuu-ŋu.*
 SENS-BE
 18113 ‘(The spider) catches all of the (insects) that have come on (the web).’
 18114 (26-mYaRmtsaR, 108)

18115 **16.1.1.3 Ambiguities**

18116 The subject participle *kuu-* prefix is homophonous with the generic person marker
 18117 for intransitive subject and object (§14.3.2.5; note that these two prefixes are prob-
 18118 ably historically related, §14.8.3). In the case of intransitive verbs, some subject
 18119 participles are therefore homophonous with generic person forms.

18120 For instance, the past imperfective generic *puu-kuu-ŋu* ‘one used to be’ in (25) is
 18121 identical to the past imperfective participle *puu-kuu-ŋu* ‘the one who used to be ...’,
 18122 discussed above (example 18 in §16.1.1.2). In this example, it is obvious that *kuu-*
 18123 is the generic person marker because the verb *puu-kuu-rga* ‘one used to be’ occurs
 18124 as the main verb; outside of any context, *tr-pytso puu-kuu-ŋu* could be understood
 18125 as a relative clause ‘the one who used to be a child’, but this is not the meaning
 18126 of this sentence.

- 18127 (25) *tceri tr-pytso puu-kuu-ŋu tce, nuu kr-ndza wuma*
 LNK INDEF.POSS-child PST.IPFV-GENR:S/O-be LNK DEM INF-eat really
 18128 *zo puu-kuu-rga.*
 EMPH PST.IPFV-GENR:S/O-like
 18129 ‘When (we) were children, (we) used to like eating it.’ (12-ndZiNgr,
 18130 137-138)

18131 More generally, the Factual, Imperfective, Past Imperfective and Aorist forms
 18132 of intransitive verbs in generic person forms are homophonous with unmarked,
 18133 Imperfective, Past Imperfective and Aorist participles, respectively. In the case
 18134 of transitive verbs, the subject participle can be identical to the object generic
 18135 form. For instance, the participle *nuu-tu-kuu-ndza* ‘the one who eats them’ in (26)
 18136 only differs from the generic *tu-kuu-ndza* ‘it eats us/people’ in (27) by the pos-
 18137 sessive prefix *nuu-*, and that prefix being optional, there are forms that are really
 18138 ambiguous between participle and generic.

- 18139 (26) *nua u-rkuu jy-azyuit-nua tce, zara nua-tu-kuu-ndza*
 DEM 3SG.POSS-side AOR-reach-PL LNK 3PL 3PL.POSS-IPFV-SBJ:PCP-eat
 18140 *srunmua ci pjy-tu,*
 râkshasî INDEF IFR.IPFV-be
 18141 ‘There was a râkshasî who ate those who had arrived near her.’ (2012
 18142 Kunbzang, 255)
- 18143 (27) *tce ndzypri ky-ti nua tce turme tu-kuu-ndza*
 LNK brown.bear OBJ:PCP-say DEM LNK people IPFV-GENR:S/O
 18144 *nua-ŋgryl*
 SENS-be.usually.the.case
 18145 ‘The brown bear, it eats people.’ (21-pri, 94)

18146 The irregular generic *tu-kuu-ti* ‘one says’ of the verb *ti* ‘say’ is also identical with
 18147 the participle ‘the one who says’.

18148 The 2SG→1SG form of transitive verbs in *-a*, due to the vowel fusion rule /-a-a/ →
 18149 *-a*, are also superficially identical to subject participles. For instance *tu-kuu-*
 18150 *ndza-a* ‘you eat me’ is pronounced [tukwundza] exactly like the generic and the
 18151 participle *tu-kuu-ndza* in the Kamnyu dialect (in the dialects of Japhug where this
 18152 vowel fusion does not occur, the forms remain distinct).

- 18153 (28) *nua kóbmuz ny tu-kuu-ndza-a*
 DEM only.after LNK IPFV-2→1-eat-1SG
 18154 ‘Eat me only after (having taken out the thorn on my foot).’ (140426 lang
 18155 yisheng-zh, 16)

18156 In the case of stative verbs and some auxiliary verbs, the infinitive has in some
 18157 cases the form *ku-*, and there is thus ambiguity between infinitive and subject
 18158 participial forms for these verbs (§16.2.1).

18159 16.1.1.4 Subject relative clauses

- 18160 The most common use of subject participles is to build participial relative clauses whose head noun is the subject; it is the only way to relativize the subject
 18161 in Japhug (§23.5.1). Headless relatives are most common (§23.4.1), but when the
 18162 head noun is overt, the relative can be either prenominal, postnominal or head-
 18163 internal. With intransitive verbs the difference between postnominal or head-
 18164 internal relatives is often difficult to ascertain, and many examples are ambigu-
 18165 ous; for instance in (29), the relative clause could be postnominal
 18166 (limited to the participle *kuu-ruqmí* ‘speaking’) or head-internal (including *teʰeme*
 18167 *ɛnuuz* ‘two girls’, and possibly even the previous adjunct).

- 18169 (29) *k^ha u-ŋguw nuaču tč'eme bnuaz kua-ruačmi pjy-tu.*
 house 3SG.POSS-inside DEM:LOC girl two SBJ:PCP-speak IFR.IPFV-exist
 18170 ‘There were two girls speaking in the house.’ (150909 xiaocui-zh, 157)

18171 Other examples such as (30) are unambiguously head-internal, since the locative adjunct *kum u-rkuu zuu* cannot belong to the matrix clause. This example
 18172 additionally illustrates the necessity of using a subject relative clause with an
 18173 existential verb to connect a noun with an postpositional phrase (†*kum u-rkuu*
 18174 *zuu pya* would not be a complete sentence).

- 18176 (30) *kumpya nuuu tce [kum u-rkuu zuu pya kuu-tu] ky-ti*
 hen DEM LNK door 3SG.POSS-side LOC bird SBJ:PCP-exist INF-say
 18177 *juu-ŋu*
 SENS-be
 18178 ‘The word *kumpya* ‘hen’ means ‘the bird that is next to the door’.
 18179 (22-kumpGa, 3).

18180 With transitive verbs, subject head-internal relatives can be distinguished from
 18181 postnominal ones by the presence of the ergative *kuu* on the head noun (§23.4.3),
 18182 as in (31).

- 18183 (31) *[tsuku u-rduu~rdob kuu zo t^hotsi u-kuu-ta] yyzu.*
 some 3SG.POSS-piece ERG EMPH seal 3SG.POSS-SBJ:PCP-put exist:SENS
 18184 ‘There are people who put a seal (on their bread).’ (160706 thotsi, 20)

18185 Prenominal relatives are relatively rare with intransitive verbs, but commonly
 18186 occur with transitive verbs, as in (32). Note the presence of indefinite person
 18187 possessive marking on the head noun *tr-pvtsø* ‘child’ in this example; unlike in
 18188 Situ (Sun & Lin 2007), the head noun of prenominal relatives in Japhug does not
 18189 take a third person singular prefix as in a possessive construction (in which case
 18190 the form †*u-pvtsø* would have been found).

- 18191 (32) *[tui-nuu u-kuu-ts^hi] tr-pvtsø yyu*
 INDEF.POSS-breast 3SG.POSS-SBJ:PCP-drink INDEF.POSS-child GEN
 18192 *u-kuu-myym juu-ŋu tce,*
 3SG.POSS-SBJ:PCP-hurt SENS-be LNK
 18193 ‘It is a disease of infants (who still drink mother milk).’ (25-kACAl, 61)

18194 There are nevertheless prenominal genitival subject relative clauses, containing
 18195 a subject participle, with the genitive *yuu* occurring between the relative

18196 clause and the head noun. This construction is especially common in texts trans-
 18197 lated from Chinese (due to calquing with 的 <de>-relatives, §23.2.3), but also
 18198 attested in natural speech, as in (33).

- 18199 (33) *nunuw kuu-sx-ndza yuu ruudab nunuw tce kurjì tu-kuu-ti*
 18200 DEM SBJ:PCP-APASS-eat GEN animal DEM LNK beast IPFV-GENR-say
 18201 *ŋu.*
 be:FACT
 18201 ‘Animals eating (other animals) are called ‘beasts’.’ (150822 kWrNi, 6)

18202 When subject relative clauses contain a complement clause, the main verb
 18203 of the complement clause can be in subject participle form (see example 84 in
 18204 §24.4.2.4).

18205 16.1.1.5 Other relative clauses

18206 In addition to subject relativization, the subject participle is also used in possessor
 18207 relatives, when the relativized element is the possessor of the subject (§23.5.10.1).
 18208 The head-internal clause in (34) is such a possessor relative; its head noun *si* ‘tree’,
 18209 possessor of the subject *wu-mat* ‘its fruits’, is marked with the genitive, showing
 18210 that it belongs to the relative.

- 18211 (34) *[si yuu wu-mat ku~kuu-tu] nuu wu-ku ri*
 18212 tree GEN 3SG.POSS-fruit TOTAL~SBJ:PCP-exist DEM 3SG.POSS-top LOC
 18213 *c-ku-zo nuu-ŋu tce.*
 TRAL-IPFV-land SENS-be LNK
 18213 ‘It lands on the top of all trees that have fruits.’ (24-ZmbrWpGa, 43)

18214 Headless possessor relative clauses, such as *nuu-mtc^{hi} my-kuu-pe* ‘those with a
 18215 foul mouth’ in (35), are even more common.

- 18216 (35) *nuu-mtc^{hi} my-kuu-pe, ky-nxtsui kuu-ra ra*
 18217 3PL.POSS-mouth NEG-SBJ:PCP-be.good INF-hide SBJ:PCP-be.needed PL
 18218 *kuny tu-kuu-nuu-ti nuunura tcayi tu-syrm̩i-nuu*
 also IPFV-SBJ:PCP-AUTO-say DEM:PL parrot IPFV-call-PL
 18218 *ŋgryl.*
 be.usually.the.case:FACT
 18219 ‘Those with a foul mouth, who say things that should be hidden, are
 18220 called ‘parrots’.’ (24-qro, 130)

18221 In addition, there are also participial relative clauses in *kuu-* whose relativized
 18222 element is neither the subject or the possessor of the subject, in particular locative
 18223 adjuncts with the relator noun *wi-stu* ‘place’ (§23.5.5.3), the only argument of
 18224 dummy subject verbs (§23.5.3.4) or arguments from complement clauses embed-
 18225 ded within the relative (§23.5.11.4).

18226 16.1.1.6 Purposive clauses and other complementation strategies

18227 Subject participles occur in three types of complement clauses and complemen-
 18228 tation strategies (§24.4.2).

18229 First, the three motion verbs *ce* ‘go’, *yi* ‘come’ and *tɔz* ‘come out’ (§15.1.2.1) use
 18230 subject participle clauses as purposive clauses (§15.2.10), such as *ndzi-kuu-qur* in
 18231 (36), whose (transitive or intransitive) subject is coreferent with that of the matrix
 18232 verb.

- 18233 (36) *azø [ndzi-kuu-qur] c^huu-yi-a je*
 18234 1SG 2DU-SBJ:PCP-help IPFV:DOWNSTREAM-come-1SG SFP
 ‘Let me come to help you.’ (tWJo 2005, 25)

18235 Sun (2012) posits the category of *supine* to refer to the cognate construction
 18236 in Tshobdun. However, given the existence of object participle purposive clauses
 18237 (§16.1.2.6, §24.4.2.1) above, I consider the supine to be only a specific use of the
 18238 subject participle, rather than an independent morphology category.

18239 Second, subject participle relative clauses (§23.8.3, §24.4.2.3) are selected as
 18240 objects or semi-objects by some verbs such as *nucpuuz* ‘pretend’, ‘imitate’, as in
 18241 (37).

- 18242 (37) *zara kuu [c^ha nuu ku-kuu-ts^hi] to-nucpuuz-nuu,*
 18243 3PL ERG alcohol DEM IPFV-SBJ:PCP-drink IFR-pretend-PL
 ‘They pretended to drink the alcohol (‘imitated an alcohol drinker’).’
 18244 (Norbzang 2012, 91)

18245 Third, participial clauses occur as genuine complements in some constructions
 18246 (§24.4.2.4), in particular in negative existential constructions and when the ma-
 18247 trix verb is itself in subject participle form, as in (38).

- 18248 (38) *[[azø a-kuu-cuu-nyo] kuu-c^ha] me*
 18249 1SG 1SG.POSS-SBJ:PCP-CAUS-be.defeated SBJ:PCP-can not.exist:FACT
 ‘Nobody can defeat me.’ (150821 edu de wangzi-zh, 5)

18250 16.1.1.7 Lexicalized subject participles

18251 A certain number of subject participles have developed specialized meanings and
 18252 can be considered to have been lexicalized. Some of these lexicalized participles
 18253 are formally identical to the regular participle (Table 16.2, for instance the noun
 18254 *kuc^{hi}* ‘candy’ in (39) as compared to the non-lexicalized participle *kua-c^{hi}* ‘the one
 18255 that is sweet’ in (40). For such nouns, lexicalization is shown by the meaning spe-
 18256 cialization and the inability to take orientation, associated motion and polarity
 18257 prefixes (but not possessive prefixes, as shown by the prefix *a-* on *kuc^{hi}* ‘candy’
 18258 in 39).

- 18259 (39) *azō a-ŋgra a-kuc^{hi} ci tx-χti ra*
 18260 1SG 1SG.POSS-salary 1SG.POSS-candy INDEF IMP-buy[III] be.needed:FACT
 ‘Give me a candy as a reward.’ (140515 congming de wusui xiaohai-zh, 82)

- 18261 (40) *tce nūnū li tú-wy-ndza tce, kua-c^{hi} tu,*
 18262 LNK DEM again IPFV-INV-eat LNK SBJ:PCP-be.sweet exist:FACT
my-kua-c^{hi} tu.
 18263 NEG-SBJ:PCP-be.sweet exist:FACT
 ‘When one eats them, some are sweet, some are not.’ (08-rasti, 55)

18264 Table 16.2 does not include the many names of profession / occupation built
 18265 from the subject participles which are semantically transparent. We can distin-
 18266 guish two cases.

18267 First, labile verbs derive participial forms such as *kua-lvy* ‘shepherd’ or *kua-*
 18268 *murkui* ‘thief’ (from *lvy* ‘graze’ and *murkui* ‘steal’) without an obligatory posses-
 18269 sive prefix; the absence of these prefixes cannot be attributed to lexicalization,
 18270 since these verbs can also be used intransitively (§14.5.1.2).

18271 Second, plain transitive verbs have to undergo antipassive derivation (§18.6)
 18272 for their subject participles to be usable as names of professions. For instance,
 18273 *kurṛyt* ‘writer’ and *kurṛtṣuβ* ‘tailor’ are from the *rṛ-* non-human antipassive
 18274 forms of *rṛt* ‘write’ and *tṣuβ* ‘sew’, while *kua-sṛ-suwxṛt* ‘teacher’ comes from the
 18275 *sṛ-* human antipassive of *suwxṛt* ‘teach’ (see Table 18.9, §18.6.7.4). Without antipas-
 18276 sive prefixes, the subject participles of (non-labile) transitive verbs require either
 18277 an overt object or a definite and anaphorically recoverable object, and are used
 18278 as names of professions. For instance, in (41), the participle *w-kua-rṛt* ‘the one
 18279 writing it’ is used with *tx-rmi* ‘name’ as its object.

- 18280 (41) [ty-rmi *wi-kw̥-ryt]* *ty-pvtsø* *nua*
 INDEF.POSS-name 3SG.POSS-SBJ:PCP-WRITE INDEF.POSS-child DEM
 18281 *wi-rkuu* *zo*, [...] *pjy-zyut tce*,
 3SG.POSS-side EMPH IFR-reach LNK
 18282 ‘It arrived near the boy who wrote the names (of the contestants).’
 18283 (150826 shier shengxiao, 110)

18284 Moreover, I do not include among lexicalized participles cases like ‘shooting
 18285 star’ (42): although this expression is not compositional, the participle here is not
 18286 frozen; the verb *mvrzaβ* ‘marry’ can also occur in finite forms with the noun *zŋgri*
 18287 ‘star’ in the meaning ‘appear, fall (of a shooting star)’ as in (43).

- 18288 (42) *zŋgri nur-kuu-mvrzaβ*
 star IPFV-SBJ:PCP-marry
 18289 ‘Shooting star’ (‘the wedding star’)
 18290 (43) *zŋgri nur-mvrzaβ wi-raŋ* *tce, tui-kyrme*
 star AOR-marry 3SG.POSS-time LNK GENR.POSS-hair
 18291 *cʰúu-wy-ryci* *tce, cʰui-ryji* *ŋu*
 IPFV:DOWNTSTREAM-INV-pull LNK IPFV-be.long be:FACT
 18292 ‘When a shooting star falls, if one pulls one’s hair, it become longer.’
 18293 (29-mWBZi, 101)

Table 16.2: Lexicalized subject participles

Noun	Base verb
<i>kuβxa</i> ‘noble’	<i>βxa</i> ‘prevail, win’
<i>kuspor</i> ‘hole’	<i>spoꝝ</i> ‘have a hole’
<i>kučhi</i> ‘candy’	<i>cʰi</i> ‘be sweet’
<i>kumŋym</i> ‘ailment’	<i>ŋym</i> ‘hurt, feel pain’
<i>kuŋu</i> ‘right thing’	<i>ŋu</i> ‘be’
<i>kumax</i> ‘bad thing’	<i>maꝝ</i> ‘not be’

18294 In the case of *kuŋu* ‘right thing’ and *kumax* ‘bad thing’, lexicalization is very
 18295 advanced, and the meanings of the nouns are very different from those of the
 18296 corresponding participles *ku-ŋu* ‘the one that is’ and *ku-maꝝ* ‘the one that is not’.
 18297 Examples such as (44) and (44) illustrate their use in collocation with verbs like
 18298 *nyma* ‘work, make’ and *fse* ‘be like’.

16 Non-finite verbal morphology

- 18299 (44) *my-ti-a* *ma kuiju* *my-tuu-nymε*
 NEG-say:FACT-1SG LNK right.thing NEG-2-make[III]:FACT
 18300 'I won't say it, because you will not do the right thing.' (2005 Kunbzang,
 18301 397)
- 18302 (45) *a-lý-wy-caβ-a* *tce tcendyre kuiju* *my-fse*
 IRR-PFV-INV-catch.up-1SG LNK LNK right.thing NEG-be.like:FACT
 18303 'If he catches up with me, (our enterprise) won't succeed.'
 18304 (25-kAmYW-XpAltCin, 37)

18305 The participle *kui-maꝝ* 'the one that is not' has been independently grammati-
 18306 calized as an identity pronoun/determined *kumaaꝝ* 'other' (see §6.8 and §9.1.7).

18307 From the nouns *kuiju* 'right thing' and *kumaaꝝ* 'bad thing', the intransitive
 18308 verbs *rukuiju* 'do the right thing', 'take good care of one's family' and *rukuiju*
 18309 'do bad things', 'happen bad things', 'be clumsy' and the transitive verb *nukumaaꝝ*
 18310 'make a mistake' have been derived by denominal derivation with *ru-* and *nu-*
 18311 (§20.4.1, §20.7.3).

18312 The subject participle *kui-mpçyr* 'the beautiful one' of the verb *mpçyr* 'be beau-
 18313 tiful' has a derived denominal transitive verb *nukumpçyr* 'wear (on important
 18314 occasions)' with highly derived semantics, reflecting the lexicalized use of the
 18315 participle in the meaning 'decoration' as in (46).

- 18316 (46) *tce li ui-kui-mpçyr* *kui-fse*
 LNK again 3SG.POSS-SBJ:PCP-be.beautiful SBJ:PCP-be.like
 18317 *tr-ky-βzu* *jui-ŋu tce*
 AOR-OBJ:PCP-make SENS-be LNK
 18318 '(The seal on breads) is used for decoration.' (160706 WzbroN, 6)

18319 Several names of diseases only exist as intransitive verbs, and the disease it-
 18320 self or the person suffering from the disease can only be referred to by using
 18321 a participial or infinitive form. In particular, the word *ky-kui-nyndza* 'leper' is
 18322 the perfective subject participle of *nyndza* 'have leprosy'; this word has some de-
 18323 gree of lexicalization (in particular, it is a common insult), but it behaves like a
 18324 participle grammatically; in particular, it can undergo totalitative reduplication
 18325 (§12.4.1.5, §23.3.2), as in (47).

- 18326 (47) *nunu kui, nunuutcu kui~kui-ryzi* *nui to-yx-mna.*
 DEM ERG DEM:LOC TOTAL~SBJ:PCP-stay DEM IFR-CAUS-recover
 18327 *to-yx-mna* *ui-qʰu* *tce tcendyre <quanzian>* *tce*
 IFR-CAUS-recover 3SG.POSS-after LNK LNK all.the.district LOC

- 18328 *kui~ky-kui-nyndza* *nui ny-yy-me*
 TOTAL~AOR-SBJ:PCP-have.leprosy DEM IFR-CAUS-not.exist
 18329 'He healed all those who were staying there (in the leper house). After he
 18330 healed them, he had eradicated leprosy (removed all lepers) from our
 18331 district.' (25-khArWm, 82)

18332 Other disease names such as *txkyzbyas* 'migraine' (as in 48), although clearly
 18333 the perfective participle or infinitive of a verb root *azbyas, is hardly ever attested
 18334 in finite form.

- 18335 (48) *txkyzbyas nui tx-mnyym q^he, tce nui ui-q^hu* *ny,*
 migraine DEM AOR-hurt LNK LNK DEM 3SG.POSS-after LNK
 18336 *ngusqy-rzab zo mui-tu-mna*
 nine.or.ten-night EMPH NEG-IPFV-recover
 18337 'After the migraine starts, it does not recede until nine or ten days.
 18338 (conversation taRrdo 2003, 9)

18339 In addition, we find nouns in *kui-* that can be suspected to be former lexicalized
 18340 participles, such as *kuijju* 'oath', which appears to contain the root of the verb *jyu*
 18341 'be', though the segment *-j-* cannot be accounted for at the present moment,³ and
 18342 *kumtqe^hu* 'toy', whose verbal root cannot be identified. The name *kusryru* 'mirror'
 18343 (an archaic word in the process of being replaced by the Tibetan *χcylzgoy* 'mirror')
 18344 could also be a frozen subject participle of the verb *ru* 'look at', but the nature
 18345 of the prefix *sry-* is unclear: it could be proprietive prefix (§18.8), or alternatively,
 18346 be analyzed as a frozen oblique participle prefix (§16.1.3.10). In the second view,
 18347 the prefix *kui-* would not be identifiable.

18348 Lexicalized subject participles appearing in compounds are also found. Several
 18349 cases must be distinguished. First, we find subject participles of transitive verbs
 18350 as the second member of a compound, with their object as the first member.
 18351 This type of compounds are lexicalized headless relative clauses, like *qalekuts^hi*
 18352 'species of kite', which combines *qale* 'wind' and the participle *ui-kui-ts^hi* of the
 18353 transitive verb *ts^hi* 'block', literally 'blocking the wind' (§5.5.1.1), a designation
 18354 referring to this bird's ability to apparently remain unmoving in the sky, as de-
 18355 scribed in (49).

³In any case, the Tangut cognate 離⁴⁶⁰⁰ *jwu*^{1.58} 'oath' shows that this derivation is very ancient and reflects a non-productive morphological process.

- 18356 (49) *ky-nuuqambumbjom müij-ce kur numare u-stu ri*
 INF-fly NEG:SENS-go ERG there 3SG.POSS-place LOC
 18357 *ku-ryzi tce, [...] u-bar nuu tu-sylqylqyt ny*
 IPFV-stay LNK 3SG.POSS-wing DEM IPFV-flap.slightly LNK
 18358 *tu-sylqylqyt ñgryl*
 IPFV-flap.slightly be.usually.the.case:FACT
 18359 ‘It does not move (flying) but remain there (in the sky) at his place,
 18360 slightly flapping its wings.’ (23-RmWrcWftsa, 40)

18361 A second type involves two participles in apposition, as *kurjukuyndzur* ‘har-
 18362 vestman’, built from the subject participles of *rju* ‘parch’ and *yndzur* ‘grind’ (§5.5.1.3).
 18363 Both verbs being transitive, the absence of a possessive prefix *u-* is an additional
 18364 clue that the form is fully lexicalized.

18365 Third, there are compounds with the subject participle of transitive or intransi-
 18366 tive verbs as first element (see also §5.5.6), for instance *kuquržngri* ‘evening star’
 18367 from *u-kui-qur* ‘the one helping him’ (*qur* ‘help’) and *žngri* ‘star’ literally ‘the star
 18368 of the helper’, for reasons explained in the following excerpt (50).

- 18369 (50) *uunuu kuičuŋgu tce kui-qur ju-kui-ce tce nuunuu,*
 DEM before LNK SBJ:PCP-help IPFV-GENR:S/O-go LNK DEM
 18370 *mua-nuu-łou myctṣa nuu tu-kui-nuna*
 NEG-AOR:WEST-come.out until DEM IPFV-GENR:S/O-rest
 18371 *mua-pjy-jyy juu-ŋu tce, tce nündza kurquržngri*
 NEG-IFR.IPFV-be.possible SENS-be LNK LNK for.this.reason evening.star
 18372 *tu-syrm̩i-nuu*
 IPFV-call-PL
 18373 ‘Long ago, when one would go helping, one was not supposed to rest
 18374 until it comes out, and for this reason it was called ‘star of the helper’.
 18375 (29-mWBZi, 62)

18376 An example with an intransitive verb is provided by the noun *kundzarmu* ‘type
 18377 of rain’, compound of the participle of *ndzar* ‘drip dry’ (§17.3.1) with the noun *tu-
 18378 muu* ‘sky, weather’ (§5.1.2.11). As shown by the definition provided for *kundzarmu*
 18379 in (51), the original meaning of this compound may have been ‘last drops of rain’
 18380 – the last rain before a relatively long period without rain.

- 18381 (51) *icqʰa tuu-muu nuu spikuku zo, spikuku zo*
 the.aforementioned INDEF.POSS-sky DEM every.day EMPH every.day EMPH
 18382 *a-ky-lyt tce tce, kui-maqʰu tce ci ci ku-lyt, ci*
 IRR-PFV-release LNK LNK SBJ:PCP-be.after LNK one one IPFV-release one

- 18383 *ci nua-jum kui-fse ηu tce, unuanu*
 one IPFV-be.sunny SBJ:PCP-be.like be:FACT LNK DEM
- 18384 *ku-kui-lyt, <zhenyu> kui-fse ku-kui-lyt*
 IPFV-SBJ:PCP-release showery.rain SBJ:PCP-be.like IPFV-SBJ:PCP-release
- 18385 *nua, numua kui-fse a-ky-lyt tce u-qhu tce*
 DEM DEM SBJ:PCP-be.like IRR-PFV-release LNK 3SG.POSS-after LNK
- 18386 *tui-mui my-lyt tu-kui-ti ηu tce, numua*
 INDEF.POSS-sky NEG-release:FACT IPFV-GENR-say be:FACT LNK DEM
- 18387 *tui-mui ku-kui-lyt nua kundzarmui tu-kui-ti*
 INDEF.POSS-sky IPFV-SBJ:PCP-release DEM type.of.rain IPFV-GENR-say
- 18388 *ηu*
 be:FACT
 'When it rains (continuously) everyday, followed by sporadic rain
 (sometimes it rains, sometimes it is sunny), when there is a showery rain
 and after that no more rain, this type of (showery) rain is called
 kundzarmu.' (definition, 2015-04-18)

18393 Nominalizations with the *x-/y-* prefix (§16.5.2) are ancient lexicalized subject
 18394 participles that have undergone a syllable reduction rule (§5.6.2, Jacques 2014b:
 18395 6) and have become completely separated from their base verbs synchronically.
 18396 There are also a few adverbs derived from verbs with a *kui-* prefix, but these
 18397 are best analyzed as lexicalized stative infinitives (§16.2.1.8).

18398 16.1.2 Object participles

18399 The object participle is a nominalized form which refers to an entity correspond-
 18400 ing to the object (§8.1.3) or semi-object (§8.1.5) of the base verb. Nearly all trans-
 18401 sitive and semi-transitive verbs (except for a handful of exceptions, §16.7) can
 18402 build an object participle by adding the prefix *kx-* (for instance *kx-ndza* from the
 18403 verb *ndza* 'eat' in 52). This form is homophonous with, and historically related
 18404 to the velar infinitive (§16.2.1, §16.8.1).

- 18405 (52) *kx-ndza*
 OBJ:PCP-eat
 'The one that is eaten.' (many attestations)

18407 In the case of secundative verbs (§14.4.2), the object participle can either refer
 18408 to the recipient or the theme, as in (53); this question is discussed in more detail
 18409 in §16.1.2.4.

- 18410 (53) *nur-ky-mbi*
 AOR-OBJ:PCP-give
 18411 ‘The one that he has given it to.’
 18412 ‘The one that has been given to him.’ (many attestations)

18413 In this section, I first describe the morphological properties of object participles (compatibility with possessive prefixes §16.1.2.1 and other prefixes §16.1.2.2).
 18414 Then, I discuss several cases of ambiguity between object participles and other
 18415 *ky-* prefixed forms in §16.1.2.3 (see also §16.2.1.1). The uses of object participles
 18416 to build relative clauses and complement clauses are described in §16.1.2.4 and
 18417 §16.1.2.6. Finally, I present a few cases of lexicalized object participles in §16.1.2.7.

18419 16.1.2.1 Possessive prefixes on object participles

18420 Unlike subject participles, object participles never require a possessive prefix. An
 18421 optional possessive prefix coreferent with the transitive subject, as in (54), can
 18422 however be added.

- 18423 (54) *a-ky-suuz*
 1SG-NMLZ:P-know
 18424 ‘The one that I know.’ (many attestations)

18425 In the case of semi-transitive verbs, the possessive prefix is also coreferent
 18426 with the subject, as in the form *w-ky-rga* ‘the one that he likes’ in (55), built in the
 18427 same way as the object participle of the transitive (tropative, §17.5) verb *nyumum*
 18428 ‘find tasty’.

- 18429 (55) *ri nuunu stu wi-ky-rga, w-ky-ny-mum*
 LNK DEM most 3SG.POSS-OBJ:PCP-like 3SG.POSS-OBJ:PCP-TROP-be.tasty
 18430 *pjy-cti.*
 IFR.IPFV-be.AFF
 18431 ‘But it was what he liked most, what he found most tasty.’ (160703
 18432 poucet3, 74)

18433 In addition to semi-transitive verbs, the complement-taking verb *c^ha* ‘can’ has
 18434 object participles taking possessive prefixes meaning ‘the one that X can Y’, X
 18435 being the subject (marked by the possessive prefix), and Y the verb in the com-
 18436 plement clause, which can be overt or not as in (56), where *nuu-my-ky-c^ha* stands
 18437 for *ky-ndo nuu-my-ky-cha* ‘the one(s) that they are able to catch’ (see additional
 18438 examples in §23.5.11.2).

- | | | | | |
|-------|------|---|---|-------------------------------|
| 18439 | (56) | <i>tce nuu-my-ky-c^ha</i> | <i>nuu k^huna χsum pui-tu</i> | <i>q^he, nura</i> |
| | | LNK 3PL.POSS-NEG-INF-can DEM | dog three PST.IPFV-exist LNK DEM:PL | |
| 18440 | | <i>kuu rcanu</i> | <i>clas</i> | <i>zo ku-ndo-nuu jnu-cti.</i> |
| | | ERG UNEXP:DEG IDEO.I:immediately | EMPH IPFV-catch-PL | SENS-be.AFF |
| 18441 | | 'The (rats) that they (the people) had been unable to (catch), there were | | |
| 18442 | | three dogs, these (dogs) caught them at once.' (150831 BZW kAnArRaR, | | |
| 18443 | | 48) | | |

16.1.2.2 Associated motion, polarity and orientation preverbs on object participles

Object participles, like subject participles, are compatible with polarity (57), associated motion (58) and orientation preverbs (58).

- 18448 (57) *tce azo a-my-ky-suiz* *txjm̥y* *nii* *ky-ndza*
 LNK 1SG 1SG.POSS-NEG-OBJ:PCP-know mushroom DEM INF-eat
 18449 *my-naz-a*
 NEG-dare:FACT-1SG
 18450 ‘I do not dare to eat the mushrooms that I do not know.’ (23-mbrAZim,
 18451 113)
 18452 (58) *ui-pci* *tce ui-cui-ky-nyma* *ci* *pjx-tu*
 3SG.POSS-outside LNK 3SG.POSS-TRAL-OBJ:PCP-work INDEF IFR.IPFV-exist
 18453 *tce,*
 LNK
 18454 ‘(The mouse) had something to do outside.’ (140518 mao he laoshu-zh, 88)

Associated motion and polarity prefixes on object participles co-occur with possessive prefixes, as shown by (57) and (58) above, but orientation preverbs (whether perfective or imperfective) do not. This is an important difference between subject and object participles (§16.1.1.2). Object participles only have at most two prefixes.

- 18460 (59) *tce pjka wuma nunu tce, pjur-ky-nur-ji* *ŋu* *tce,*
 LNK gourd really DEM LNK IPFV-OBJ:PCP-AUTO-plant be:FACT LNK
 18461 ‘The gourd proper is cultivated (it does not grow on its own).’
 18462 (16-CWrNgo, 63)

18463 Finite relative clauses, instead of object participles, can be used to specify both
18464 TAME and the subject (§23.2.2).

Unlike subject participles, object participles are attested with the progressive *asuu-* prefix, as in (60). It is the only non-finite form compatible with this prefix.

- (60) *tc^heeme nuu kuu icq^ha, ur-jab <meihua>,*
 girl DEM ERG the.aforementioned 3SG.POSS-hand plum.blossom
munto_v pui-k_v-ysuu-ndo nuu pjy-y_vryst.
 flower PAST.IPFV-OBJ:PCP-PROG-take DEM IFR-throw
 ‘The girl threw down the plum blossom, the flower that she was holding
 in her hand.’ (150907 yingning-zh, 30)

These forms are rare and difficult to identify, as they are always ambiguous with object participles or infinitive of causativized verbs. In the case of (60), the context makes it clear that interpretation as the participle of a progressive form is the only possibility, as the same verb with the progressive appears a few sentences before in (61).

- (61) *ur-jab nutcu, icq^ha, <meihua> ci*
 3SG.POSS-hand DEM:LOC FILLER plum.blossom INDEF
pjy-k-ysuu-ndo-ci,
 IFR.IPFV-PEG-PROG-take-PEG
 ‘She was holding a plum blossom in her hand.’ (150907 yingning-zh, 20)

16.1.2.3 Ambiguity

There is rampant ambiguity between object participles, *k_v-* infinitives and subject participles of passive verbs. The question of the ambiguity between object participles and *k_v-* infinitives is discussed in §16.2.1.3.

The passive *a-* merges with the subject participle as /k_v/, homophonous with the infinitive and the object participle. Potentially ambiguous examples are very common. For instance, in (62), the form /k_vrku/ could be argued to be an object participle *k_v-rku* or a passive subject participle *kuu-_v-rku*; the second option is chosen here due to the semantics, which fits the passive *arku* ‘be put in, be located in’ better (as this passive verb is in the process of becoming a locative existential verb, §22.5.1.2). In the absence of any argument in favour of the passive analysis, the ambiguous /k_v-/ forms are analyzed as object participles by default.

- (62) *srtc^ha ur-ŋguu kuu-_v-rku <yangyu> c^ho lypuy nura*
 earth 3SG.POSS-inside SBJ:PCP-PASS-put.in potato COMIT radish DEM:PL

- 18492 *tu-ndze ηgryl.*
 IPFV-eat[III] be.usually.the.case:FACT
 18493 ‘It eats the radish and the potatoes that are in the ground.’
 18494 (25-akWzgumba, 22)
- 18495 Due to the fact that passive verbs in Japhug are barely attested in perfective
 18496 forms (§18.1.1), participles with perfective prefixes can be considered to be object
 18497 participles, especially in cases like (63), where the participle *nui-kγ-χtγr* ‘(those)
 18498 that have been scattered’ occurs in a sentence following the transitive form *ŋγ-χtγr*
 18499 ‘it scattered, it smashed’.
- 18500 (63) *to-yi tce nui-zmbruu ŋγ-χtγr zo nui-ŋu tce,*
 IFR:UP-COME LNK 3PL.POSS-ship IFR-scatter EMPH SENS-be LNK
 18501 *wi-zda ra nui-pʰe, nγki, “nunui zmbruu*
 3SG.POSS-companion pl 3PL.POSS-DAT FILLER DEM ship
 18502 *nui-kγ-χtγr nui wi-taʂ kγ-nqob-nui ra”*
 AOR-OBJ:PCP-scatter DEM 3SG.POSS-on IMP-hang-PL be.needed:FACT
 18503 *to-ti*
 IFR-say
 18504 ‘The (monster) came up and smashed their ship, and (Norbzang) said to
 18505 his companions: “Grab the (pieces of the) ship that have been scattered”.
 18506 (2012 Norbzang, 31-32)
- 18507 The same analysis as object participles, rather than passive subject participles
 18508 is applied to examples of perfective *kγ-* forms also when the transitive verb is not
 18509 found in finite form in a neighbouring sentence, such as (64).
- 18510 (64) *fsapab wi-ŋgo rcanu, pui-kγ-pryt zo*
 animals 3SG.POSS-disease UNEXP:DEG AOR-OBJ:PCP-break EMPH
 18511 *tγ-fse nui-ŋu.*
 AOR-be.like SENS-be
 18512 ‘It was like the disease of the cattle had been (suddenly) stopped.’ (2003
 18513 kAndZislama, 190)
- 18514 A more marginal case of homophony occurs between object participles and
 18515 velar infinitives on the one hand, and several finite forms taking the series A
 18516 orientation preverb *kγ-* on the other hand (§16.2.1.1).

18517 16.1.2.4 Object relative clauses

18518 Object participles can be used to build object relative clauses, but compete in this
 18519 function with finite relatives (§23.5.3). They differ in this regard from subject
 18520 relatives, which are the only available construction to relativize transitive and
 18521 intransitive subjects.

18522 As was described in §16.1.2.2, object participles, unlike subject and oblique
 18523 participles, cannot combine possessive and orientation preverbs.

18524 Object participles with orientation preverbs are used in relative clauses with
 18525 indefinite subjects, or with definite third person subjects as in (65).

- 18526 (65) [tamu kuu qajyi nuu-kx-mbi] nuu tu-ndze pjx-ŋu
 ANTHR ERG bread AOR-SBJ:PCP-give DEM IPFV-eat[III] IFR.IPFV-be
 18527 ‘(As) he was eating the (pieces of) bread that Lhamo had given him.’ (2002
 18528 qajdoskAt, 111)

18529 The only example of first or second person that could be interpreted as subject
 18530 in a perfective object participle relative in the corpus is (66), but in this example
 18531 (translated from Chinese), the referent of the first person is a pen that has been
 18532 used to write a poem; the ergative postpositional phrase *azo ku* here can be either
 18533 analyzed as an instrument (‘the poem that has been written using me’) or as a
 18534 causee (§8.2.2.6, ‘the poem that he has made me write’), as shown by the presence
 18535 of the causative *sui-* prefix, not a subject.

- 18536 (66) [azo kuu pui-kx-sui-ryt] nunuu pjuu-ndum pui-ŋu nétc
 1SG ERG AOR-OBJ:PCP-CAUS-write DEM IPFV-read SENS-be SFP
 18537 (The pen said: the poet is reading the poem) that has been written using
 18538 me.’ (150818 bi he moshuihu-zh, 143)

18539 When the subject is first or second person, an object participle with a posses-
 18540 sive prefix is used instead. In (67) for instance, we find *ji-kx-rku* ‘the thing that
 18541 we give’ (see §16.5.1 concerning the meaning of this verb) and *ny-kx-suso* ‘the
 18542 thing that you think / that you want’ with a first plural and a second singular
 18543 possessive prefix, respectively.

- 18544 (67) nuu ma izo ji-kx-rku me, atu
 DEM apart.from 1PL 1PL.POSS-OBJ:PCP-put.in not.exist:FACT up.there
 18545 spyi tx-ce q^he, laχtc^ha yotcu ny-kx-suso zo
 granary IMP:UP-go LNK thing where 2SG.POSS-OBJ:PCP-think EMPH
 18546 numuu, ny-mja^hb, ny-rna, ny-cna c^ho ra
 DEM 2SG.POSS-eye 2SG.POSS-ear 2SG.POSS-nose COMIT PL

- 18547 *ku~ku-spor* *nua u-ŋgwa* *tce a-ky-tuu-rke*
 TOTAL~SBJ:PCP-have.a.hole DEM 3SG.POSS-inside LOC IRR-PFV-2-put.in[III]
- 18548 *q^he,*
 LNK
 ‘We don’t have anything else to give you as a departing present, go up there in the granary, and whatever you want, put it in all the holes (in your body), you eyes, you ears, you nose etc.’ (31-deluge, 136)

18552 When the subject is a definite third person, it is also possible to have a third
 18553 person possessive prefix on the object participle, as in (68) (or 58 above).

- 18554 (68) *l^h-fso_K* *u-juja* *nua pjuu-ru* *tce [u-ky-numbrwpw]*
 AOR-be.clear 3SG-along DEM IPFV:DOWN-look LNK 3SG.POSS-OBJ:PCP-ride
 nua k^hu pju-cti *pju-ŋu,*
 DEM tiger PST.IPFV-be.AFF SENS-be
 ‘As the day broke, looking down, he (progressively realized that) what he
 18557 was riding was a tiger.’ (2005 khu, 20)

18558 Unlike in Tshobdun (Sun & Lin 2007: 10), in Japhug object participial relatives
 18559 with possessive prefixes are not restricted to generic state of affairs, but can refer
 18560 to particular situations as in examples such as (68) and (69).

- 18561 (69) *a-ta_K,* *tce ny-kuu-mŋym* *tc^hi pju-fse* *ma [alo*
 1SG.POSS-aunt LNK 2SG.POSS-SBJ:PCP-hurt what SENS-be.like LNK upstream
 q^haq^hu *ny-ky-ti]* *nura t^h-stu-t-a*
 behind.the.house 2SG.POSS-OBJ:PCP-say DEM:PL AOR-do.like-PST:TR-1SG
 ‘Stepmother, how do you feel, I did the things you said (about creating a
 18563 lake) up there behind the house.’ (28-smAnmi, 361)

18565 In object participial relatives, when the relativized element is overt, it is gene-
 18566 rally located before the participle, as in (70).

- 18567 (70) *[nuŋa u-ndzi t^hu-ky-rryduut], t^hu-ky-t_Sw_B nua*
 cow 3SG.POSS-skin AOR-OBJ:PCP-skin AOR-OBJ:PCP-sew DEM
 u-ŋgwa nua cu ko-ce
 3SG.POSS-inside DEM:LOC EVD:EAST-go
 ‘He went into the cow hide that had been skinned and sewed.’
 18569 (02-deluge2012, 32)

While the relative clause in (70) can either be interpreted as head-internal or post-nominal, clear examples of head-internal object relatives are found (§23.4.3.2), as in (71), where the head noun *k^ha* is located between the instrumental adjunct *kui-c^hi* *kui* and the participle.

- (71) [kui-c^hi kui k^ha t^h-ky-sui-βzu] ci pjy-mto-ndzi
 SBJ:PCP-be.sweet ERG house AOR-OBJ:PCP-CAUS-make INDEF IFR-see-DU
 ‘They saw a house that was made from sweets.’ (140507 tangguowu-zh, 78)

Prenominal object participial relatives are mainly attested with participles with a possessive prefix, such as *a-ky-su*z in (72).

- (72) *numu paχci* [azo a-ky-su] nur nura γyzu
 dem apples 1SG 1SG.POSS-OBJ:PCP-know allium DEM DEM:PL exist:SENS
 ‘Of the apples, (the aforementioned) are the ones I know about.’
 (07-paXCi, 73)

Examples of prenominal object participial relatives with orientation preverbs are also attested, as in (73) (a near minimal pair with 71) and (74). This type of relative clauses are considerably less common than the corresponding head-internal ones, especially in texts that have not been translated from Chinese as in (74).

- (73) [*lonba com kui nu-ky-sui-βzu*] k^ha pjy-ŋu
 all iron ERG AOR-OBJ:PCP-CAUS-make house IFR.IPFV-be
 ‘It was a house made completely from iron.’ (140505 liuhaohan zoubian tianxia-zh, 153)

- (74) *tce* [k^hru kui t^hui-ky-sui-lxt] lašdum kūnγ tu ma
 LNK cast.iron ERG AOR-OBJ:PCP-CAUS-release tool also exist:FACT LNK
 ‘There are also tools that are made of cast iron.’ (30-Com, 29)

As mentioned above (example 53), the object participles of secundative verbs can either refer to their object proper (the recipient, §14.4.2) or to the theme, which is not indexed on the verb but occurs in absolute form (§8.1.6). In fact, in the corpus examples of theme relativization with the object participle are quite common (as 65 above and 75 and 76 below), but recipient relativization is rare (77). Examples can however be elicited without difficulty.

- 18598 (75) *nur ma u-ky-mbi maje tce,*
DEM apart.from 3SG.POSS-OBJ:PCP-give not.exist:SENS LNK
18599 “*a-me ta-mbi ra” to-ti tce,*
1SG.POSS-daughter 1→2-give:FACT be.needed:FACT IFR-say LNK
18600 ‘He had nothing else to give him, and said ‘I give you my daughter’.
18601 (2011-04-smanmi, 171)
- 18602 (76) *tcendyre [tumukyryji ku pur-ky-suixcxt] ra pjy-nxxtsun tce tce*
LNK heaven ERG AOR-OBJ:PCP-teach PL IFR-be.grateful LNK LNK
18603 *nucimuma zo pjy-nur-ce.*
immediately EMPH IFR:DOWN-VERT-go
18604 ‘(Pu’an) was thankful for the things that the god of heaven had taught
18605 him and went back (to earth) immediately.’ (150827 taisui-zh, 135)
- 18606 (77) *icqʰa, [kynntcʰu-xpa zo, nyki, xciri nuu-ky-suixcxt]*
the.aforementioned several-year EMPH FILLER weasel AOR-OBJ:PCP-teach
18607 *nur pjy-sat,*
DEM IFR-kill
18608 ‘He killed the weasel that he had trained for several years.’ (140518 xuezhe
18609 he huangshulang-zh, 28)
- 18610 With indirective verbs, the object participle can only refer to the theme, as in
18611 (78), for these verbs the recipient must be relativized with the oblique participle
18612 (§16.1.3.7).
- 18613 (78) *ny-ky-tʰu uu-yvzu ny, tʰy-tʰe jyY*
2SG.POSS-OBJ:PCP-ask QU-exist:SENS LNK IMP-ask[III] be.allowed:FACT
18614 ‘If you have and questions, you can ask them.’ (conversation 14-11-08)
- 18615 The semi-object of semi-transitive verbs (§8.1.5) can also be relativized with a
18616 object participial relative, as *ji-ky-rga* ‘the one that we like’ in (79).
- 18617 (79) *icqʰa <macha> ky-ti nuu [izora stu*
the.aforementioned macha.tea OBJ:PCP-say DEM 1PL most
18618 *ji-ky-rga] nyu*
1PL.POSS-OBJ:PCP-like be:FACT
18619 ‘The (type of tea) called ‘macha’ is what we like most.’ (30-macha, 1)
- 18620 Secundative verbs undergoing antipassivization become semi-transitive verbs
18621 (§14.4.2, §18.6.4) with the theme remaining the semi-object. Like other semi-transitive

18622 verbs, these antipassive verbs can build an object participle, which can then be
 18623 used to relativize the theme, as in (80).

- 18624 (80) *ny-ky-ry-mbi* *nui tc^{hi} puu-ŋu?*
 18625 2SG.POSS-OBJ:PCP-APASS-give DEM what PST.IPFV-be
 'What was it that you gave (to people)?' (elicited)

18626 Object participles also occur in genitival relatives (§23.2.3, postnominal rela-
 18627 tive with the genitive postposition *yuu* occurring between the relative clause and
 18628 the head noun), as in example (81). This type of examples is frequently found
 18629 in texts translated from Chinese, but unattested in the rest of the corpus for ob-
 18630 ject relativization, and is a clear case of calque (§23.2.3). Although speakers do
 18631 accept these examples, they cannot be considered to be representative of the nor-
 18632 mal grammar of the language.

- 18633 (81) *tce [<shuijing> kuu ty-ky-su-βzu]* *yuu tuu-xtsa*
 18634 LNK crystal ERG AOR-OBJ:PCP-CAUS-make GEN INDEF.POSS-shoe
 18635 *nuura jo-yut.*
 'DEM:PL IFR-bring
 '(The bird) brought shoes made of crystal.' (140504 huiguniang-zh, 162)

18636 16.1.2.5 Other relative clauses

18637 Just like subject participles can relativize the possessor of subjects §16.1.1.5), ob-
 18638 ject participles can be used to relativize possessors of objects, as in (82), where the
 18639 head of the relative *ndzi-mpas* *muu-ty-ky-ryt* is not the object 'their eyes' (which
 18640 would result in a non-sensical sentence 'their eye which had not been drawn
 18641 were still on the wall') but rather the possessors (the dragons).

- 18642 (82) *[ndzi-mpas muu-ty-ky-ryt]* *numi tcetu, znde uu-tas*
 18643 3DU.POSS-eye NEG-AOR-OBJ:PCP-draw DEM:DU UP wall 3SG.POSS-on
 18644 *nuatcu numuu pjy-nuu-tu-ndzi.*
 18645 DEM:LOC DEM IFR.IPFV-AUTO-exist-DU
 'The two (dragons) whose eyes had not been drawn were still present on
 the wall.' (160718 hualongdianjing-zh, 62)

18646 In light verb constructions with *lvt* 'release' (§22.4), the oblique argument en-
 18647 coded with the relator noun *uu-tas* 'on, above' (§8.3.4.3) can be relativized with
 18648 the object participle. For instance, in (83) and (84), although the noun *tusŋas* 'en-
 18649 chantment' is the object of the verb *lvt* 'release' in the collocation meaning 'cast a

spell', the participial relative *tusŋas tʂ-ky-lxt* means here '(prince) who has been enchanted', not 'the spell that has been cast'.⁴ The head of this relative is therefore not the object, but the recipient, although this oblique argument is marked with *u-tas* 'on, above', as shown by example (84).

- 18650 (83) *qacpa nuunu, icqʰa nu, rʃyłpu ci yuu u-tcui nuunu, nykinuu,*
 18651 *frog DEM FILLER DEM king INDEF GEN 3SG.POSS-son DEM FILLER*
 18652 *tui-sŋas tʂ-ky-lxt tce qacpa*
 18653 *NMLZ:ACTION-enchant AOR-OBJ:PCP-release LNK frog*
 18654 *nu-ky-syβzu pʃ-ny.*
 18655 *AOR-OBJ:PCP-transform IFR.IPFV-be*

18656 'This frog was the son of a king who had been enchanted and
 18657 transformed into a frog.' (140429 qingwa wangzi-zh, 180-181)

- 18658 (84) *a-tcui nuu u-tas tui-sŋas to-lxt tce*
 18659 *1SG.POSS-son DEM 3SG.POSS-on NMLZ:ACTION-enchant IFR-release LNK*
 18660 *nuu mbaly-puu ci pʃ-syβzu.*
 18661 *DEM bull-DIM INDEF IFR-transform*
 18662 'She cast a spell on my son and turned him into a calf.' (140512 fushang he
 18663 yaomo-zh, 105)

18664 In addition, there are cases where an object participle can relativize a locative
 18665 adjunct (§23.5.5.2). The object participle of the perception verbs *mto* 'see' and
 18666 *mtsʰym* 'hear' can be used to make headless locative relative clauses meaning '(a
 18667 place) where X can see/hear Y, in particular when occurring as the goal of a
 18668 motion verb as in (85). Note the optionality of the ergative on the nouns *tci-rna*
 18669 'our ears' and *tci-mŋas* 'our eyes' in (85).

- 18670 (85) *[tci-rna mʂ-ky-mtsʰym], [tci-mŋas mʂ-ky-mto]*
 18671 *1DU.POSS-ear NEG-OBJ:PCP-hear 1DU.POSS-eye NEG-OBJ:PCP-see*
 18672 *a-jʂ-ce-ndzi ra*
IRR-PFV-go-DU be.needed:FACT
 'May they go away (to a place) where our ears cannot hear them, where
 18673 our eyes cannot see them.' (2003-kWBra, 23)

18674 It is not possible in (85) to replace the object participle by an oblique participle
 18675 *sʂ-*.

⁴The second interpretation is however possible, and these relatives are ambiguous.

18675 16.1.2.6 Purposive clauses

18676 While *ky-* prefixed non-finite verb forms are very common in complement clau-
 18677 ses, the near-totality of these forms are infinitives rather than object participles
 18678 (§16.2.1.5), since there are no restrictions on intransitive verbs (§16.2.1).

18679 The only complementation strategy where an object participle, rather than an
 18680 infinitive, has to be posited occurs in the purposive clause of motion verbs when
 18681 the verb of the purposive clause is transitive and coreference occurs between its
 18682 object (rather than subject) and the subject of the matrix motion verb, as *ky-nyk^hu*
 18683 in (86).

- 18684 (86) <*xingqi> rayri zo tce numuu syβzua yui uu-k^ha nutcu*
 18685 week each EMPH LNK DEM mouse GEN 3SG.POSS-house DEM:LOC
ky-nyk^hu ju-yi pjy-ŋu
 18686 OBJ:PCP-invite IPFV-come IPFV.IFR-be
 18687 ‘He would come to the mouse’s house as a guest.’ (150818 muzhi
 guniang-zh, 299).

18688 A possessive prefix coreferent with the transitive subject of *nyk^hu* can be op-
 18689 tionally added on this object participle, as in (87).

- 18690 (87) *a-ky-nyk^hu jy-ye*
 18691 1SG.POSS-OBJ:PCP-invite AOR-come[II]
 ‘He came to my house as a guest (following my invitation).’ (elicited)

18692 In purposive clauses, the rule is thus that the subject participle is used when
 18693 there is subject-subject coreference (§16.1.1.6), and the object participle in cases
 18694 of object-subject coreference (Jacques 2016a: 248).

18695 16.1.2.7 Lexicalized object participles

18696 While some object participles are commonly used as headless relative clauses,
 18697 few can be considered to be fully lexicalized.

18698 The verbs related to food ingestion such as *ndza* ‘eat’, *ts^hi* ‘drink’, *ndz̥yts^hi* ‘eat
 18699 and drink’, *mɔr* ‘eat powdery food’ have object participles such as *ky-ndza* ‘food’,
 18700 *ky-ts^hi* ‘drink (n), beverage’, *ky-ndz̥yts^hi* ‘food and drink’ and *kymɔr* ‘dry tsampa’,
 18701 which commonly occur in enumerations (§9.2.2.1) with nouns not derived from
 18702 verbs, as in (88).

- 18703 (88) *w-ky-ndza* *w-ky-ts^hi* *w-tukrimgo* *ra*
 3SG.POSS-OBJ:PCP-eat 3SG.POSS-OBJ:PCP-drink 3SG.POSS-butter.bread PL
 18704 *to-yut* *q^he, tcendyre, nura* *pý-wy-mbi* *q^he,*
 IFR:UP-bring LNK LNK DEM:PL IFR-INV-give LNK
 18705 ‘She brought food, drinks and butter bread for her and gave them to her.’
 18706 (2003-kWBRa, 70)

18707 In these enumerations, sometimes only the first element takes a possessive
 18708 prefix, as in (89), where we find *ndzi-ky-ndza ky-ts^hi* instead of the equally possible
 18709 *ndzi-ky-ndza ndzi-ky-ts^hi* (however, if the first *ky-* participle in the enumeration has
 18710 no possessive prefix, the following participle cannot take one).

- 18711 (89) *ndzi-ky-ndza* *ky-ts^hi* *my-mbrxt,*
 2DU.POSS-OBJ:PCP-eat OBJ:PCP-drink NEG-ACAUS:cut
 18712 *ndzi-ku-ndzyts^hi* *a-pui-me* *smualym*
 2DU.POSS-SBJ:PCP-eat.and.drink IRR-IPFV-not.exist prayer
 18713 ‘May you never lack food or drink, may there nobody (coming to) eat
 18714 you.’ (2003kAndZWslama, 218)

18715 In these examples, the possessive prefix always refer to the person or animal
 18716 ingesting the food (not the person giving the food), and although these forms
 18717 are very common, since their semantics is completely predictable from the base
 18718 verb, and since the possessive prefix behaves like that of a normal oblique par-
 18719 ticiple, there is no specific reason to consider that they have become nouns and
 18720 constitute lexical entries that must be distinguished from the verb (except in the
 18721 case of *kymor* ‘dry tsampa’, whose meaning has become more specific).

18722 The forms *ky-pa* and *ky-stu*, derived from the verbs from the verbs *pa* ‘do’ and
 18723 *stu* ‘do like’, both meaning ‘manner, method (to solve a problem)’ (like Chinese
 18724 办法 <bàn fǎ> ‘method’), are other potential candidates to be analyzed as lexical-
 18725 ized object participles (or infinitives). They are particularly commonly used with
 18726 existential verbs to mean ‘X has (no/a) way to do it’ (X being referred to by the
 18727 possessive prefix on *ky-pa* or *ky-stu*), as in (90).

- 18728 (90) *a-kypa* *maje*
 18729 1SG.POSS-method not.exist:SENS
 ‘I have no way to do it.’ (many attestations)

18730 However, collocation in texts of *ky-pa* and *ky-stu* with the finite forms of the
 18731 verbs *pa* ‘do’ and *stu* ‘do like’, as in (91) and, suggest that these forms are still
 18732 synchronically linked with these verbs, and that it may be more economical to
 18733 analyze them as participles rather than derived nouns.

- 18734 (91) *ny-ky-pa* *tui~tu* *ny, ty-pe* *ma mtsʰoblaŋ*
 2SG.POSS-OBJ:PCP-do COND~exist:FACT LNK IMP-do[III] LNK water.monster
 18735 *ty-ye*
 AOR:UP-come[II]
 18736 ‘If you have some way (to protect us), use it, because the water monster
 18737 has come.’ (Norbzang 2012, 27-28)
- 18738 (92) *nunuu u-taŋ* *nuatcu* *ny-ky-stu* *w-yŋzu* *tce*
 DEM 3SG.POSS-on DEM:LOC 2SG.POSS-OBJ:PCP-do.like QU-exist:SENS LNK
 18739 *a-ty-tui-ste* *ma tce*
 IRR-PFV-2-do.like[III] LNK LNK
 18740 ‘If you have a way to deal with him, use it.’ (25-kAmYW-XpAltCin, 37)

18741 The object participle *ky-ti* from the verb *ti* ‘say’, although transparently derived,
 18742 has an unpredictable meaning in the existential construction. With a negative
 18743 existential verb, in addition to the expected meaning ‘have nothing to say’, it can
 18744 be interpreted as ‘be unable to say for sure’, as in (93).

- 18745 (93) *a-ky-ti* *ci* *maje*
 1SG.POSS-OBJ:PCP-say INDEF not.exist:SENS
 18746 ‘I cannot say for sure.’ (many examples)

18747 In addition, there are highly lexicalized object participles occurring as mem-
 18748 bers of compounds; these cases are generally ambiguous, and alternatively ana-
 18749 lyzable as lexicalized velar infinitives (§16.2.1.9). The incorporating verb *kvtupa*
 18750 ‘tell’ is an interesting case: it combines the form *ky-ti* (either the participle ‘what
 18751 one says’ or the infinitive ‘to say’) in *status constructus* *kvtu-* (the alternative
 18752 form *kvtipa* is also attested) with the auxiliary *pa* ‘do’ (§22.4.2.5).

18753 16.1.3 Oblique participles

18754 The *sŋ*-prefix (and its allomorphs *sŋy-*, *sŋz-* and *z-*) is used for non-core argument
 18755 nominalization, in particular recipients of indirective verbs (§8.2.3.2, §8.3.1), in-
 18756 struments (§8.2.2.4), place and time adjuncts, as in (94). It takes a possessive prefix
 18757 which can be coreferent with any core argument (subject or object).

- 18758 (94) *u-sŋ-yi*
 3SG.POSS-OBL:PCP-come
 18759 ‘The place/moment from where/when he/it comes.’ (elicited)

18760 Related forms include the gerund (§16.6.1) and the purposive converb (§16.6.2);
 18761 the historical relationship between these categories is discussed in §16.8.2.

18762 **16.1.3.1 Allomorphy**

18763 The base form of the oblique participle is *syr-*, but three additional allomorphs are
 18764 also found: *sryz-*, *z-* and *sry-*.

18765 The allomorph *sry-* or *sryx-* (depending on the voicing of the next consonant)
 18766 is attested with intransitive (or labile) monosyllabic verbs with an onset with-
 18767 out velar/uvular consonant, and without consonant cluster involving a preinitial
 18768 ([§17.2.1.4](#)). This allomorph is to some extent lexicalized, and is not found with
 18769 all verbs fulfilling these criteria. Table 16.3 presents some of the most common
 18770 examples of *sry-* participles in Kamnyu Japhug.

Table 16.3: Examples of oblique participles in *sry-*

Base verb	Oblique participle
<i>pʰyn</i> ‘be efficient’	<i>w-sryx-pʰyn</i> ‘advantage’
<i>me</i> ‘not exist’	<i>w-sry-me</i> ‘place where there is no X’
<i>tok</i> ‘come out’	<i>w-sry-tok</i> ‘place where X grows, place from which X comes out’
<i>ly</i> ‘graze’	<i>w-sry-ly</i> ‘pasture’
<i>ndzor</i> ‘be attached’	<i>w-sry-ndzor</i> ‘place where X is attached’
<i>zo</i> ‘land (of bird)’	<i>w-sry-zo</i> ‘place where X lands’
<i>ce</i> ‘go’	<i>w-sryx-ce</i> ‘direction, place towards which X goes’

18771 Some of the verbs taking the *sry-* allomorph do also occur with *syr-*. For in-
 18772 stance, *me* ‘not exist’ is attested with both *w-sry-me* as in (95) and *w-sy-me* in (96).
 18773 However, most verbs in Table 16.3 are only compatible with the *sry-* allomorph.

- 18774 (95) *zmbulum* *w-sry-tok* *nura* *tu-tok*
 species.of.mushroom 3SG.POSS-OBL:PCP-come.out DEM:PL IPFV-come.out

18775 *ŋu.* *zmbulum* *w-sry-me* *ra* *kunx*
 be:FACT species.of.mushroom 3SG.POSS-OBL:PCP-not.exist PL also
tu-tok *cti.*
 IPFV-come.out be.AFF:FACT

18777 ‘It grows in the places where the *youlaku* mushroom grows, and also in
 18778 the places where there are no *youlaku*.’ (22-BlamajmAG, 22)

- 18779 (96) *txjmry* *w-sy-tu* *w-sy-me* *yŋzu.*
 mushroom 3SG.POSS-OBL:PCP-exist 3SG.POSS-OBL:PCP-not.exist exist:SENS
 18780 ‘There are places where there are mushrooms, and other places where
 18781 there aren’t.’ (20-grWBgrWB, 46)

18782 The allomorphs *syz-* and *z-* occur in the same context, with non-monosyllabic
 18783 verb stems, where the first syllable (either a productive or a frozen prefix) is
 18784 sonorant-initial. These two allomorphs are completely interchangeable, without
 18785 restriction on particular verbs or the function of the the relativized element (in-
 18786 strument, locative or temporal adjunct). For instance, the locative participle of
 18787 *rrzi* ‘stay’ is attested as both *w-syz-rrzi* and *w-z-rrzi* “the place when he/it stays’
 18788 in the corpus, as shown by examples (97) and (98), a few sentences away from
 18789 each other in the same story.

- 18790 (97) *tceri numuu sytc^ha nuu li icq^ha qapribuuxsi*
 18791 but DEM place DEM again the.aforementioned python
wi-syz-rrzi pjv-cti.
 18792 3SG.POSS-OBL:PCP-stay IFR.IPFV-be.AFF
 ‘But that place was the abode of a python.’ (140511 xinbada-zh, 92)
- 18793 (98) *tce <xinbab> rcanuu, maka nutcu wu-z-rrzi*
 18794 LNK Sinbad UNEXP:DEG at.all DEM:LOC 3SG.POSS-OBL:PCP-stay
wu-tur-syy-mu pjv-syre zo tce,
 18795 3SG.POSS-NMLZ:DEG-PROP-be.afraid IFR.IPFV-be.ridiculous EMPH LNK
 18796 ‘Sinbad, the place where he stayed was extremely terrifying.’ (140511
 xinbada-zh, 99)

18797 The *sy-* allomorph, rather than *syz-* or *z-*, is however found when preceding
 18798 the vertitive (§19.2) and autive (§19.1) prefixes, as in (99).

- 18799 (99) *q^he tú-wy-cuu my-kui-k^hui sy-nuu-łob ri*
 18800 LNK IPFV-INV-open NEG-SBJ:PCP-be.possible OBL:PCP-AUTO-come.out also
kui-me ta-βzu.
 18801 SBJ:PCP-not.exist AOR:3→3'-make
 18802 ‘(He put tape on the drawers so that) they could not be opened, and there
 18803 was no way to come out of it (to prevent the rats inside from escaping).’
 (150831 BZW kAnArRaR)

18804 The allomorph *syy-* is also (though more rarely) attested with the autive *nuu*-
 18805 of verbs that take *syy-* in their simplex form. For instance, next to *sy-nuu-łob*, the
 18806 oblique participle *syy-nuu-łob* is found in (100) (without autive prefix the oblique
 18807 participle is *w-syy-łob*, see Table 16.3).

- 18808 (100) *w-svγ-nuu-lob* *yuu w-kur-spor*
 3SG.POSS-OBL:PCP-AUTO-come.out GEN 3SG.POSS-SBJ:PCP-have.a.hole
 18809 *pjx-ŋu.*
 IFR.IPFV-be
 18810 ‘It was the hole from which it (the animal) came out (of the cave).’
 18811 (140511 xinbada-zh, 83)

18812 The *syz-* allomorph is not completely impossible with the autive *nū-* prefix,
 18813 but only one example, *nū-syz-nuu-NGyt* ‘the place where they (had) parted ways’
 18814 (101), is found in the whole corpus (and the form *sx-nuu-NGxt* is also attested, see
 18815 example 122 in §16.1.3.5).

- 18816 (101) *nū-syz-nuu-NGyt* *yuu icq^ha, tʂʂSYNGyt nutcu*
 3PL.POSS-OBL:PCP-AUTO-ACaus:separate GEN FILLER crossroads DEM:LOC
 18817 *jx-azyut-nuu tce,*
 AOR-reach-PL LNK
 18818 ‘They arrived at the crossroads where they had parted ways.’ (140508
 18819 benling gaoqiang de si xiongdi, 109)

16.1.3.2 Transitivity

18821 Like subject and object participles, oblique participle keep the verb transitivity,
 18822 and transitive verbs can take an overt object as *qaj w-sv-ji* ‘place for planting
 18823 wheat’⁵ in (102).

- 18824 (102) *qajsta nuunu kuacunγw* *qaj w-sv-ji*
 TOPO DEM in.former.times wheat 3SG.POSS-OBL:PCP-plant
 18825 *pjx-pe tce tce nündza qajsta tu-ti-nuu jnu-ŋu*
 IFR.IPFV-be.good LNK LNK for.this.reason TOPO IPFV-say-PL SENS-be
 18826 ‘Qaysta, in former time it was a wheat field which was good, and for this
 18827 reason, it is called ‘Qaysta’ ‘the place of the wheat.’ (140522 kAmYW
 18828 tWji2, 104)

18829 An antipassive form (§18.6) is necessary if there is no definite object. For in-
 18830 stance in (103), *syz-rr-ji* ‘place for planting, field’ is based on the *rr-* antipassive
 18831 of *ji* ‘plant’; this form, unlike *w-sv-ji* in (102), is used without (and cannot occur
 18832 with) any noun specifying the crop planted in the field.

⁵Note that participle *w-sv-ji* can have other interpretations, including ‘the period when it is planted’, as in (129) below.

- 18833 (103) *tce tuamgri syz-ry-ji* *nui koŋla* *ŋy-ŋy-me-nui*
 LNK TOPO OBL:PCP-APASS-plant DEM completely IFR-CAUS-not.exist-PL
 18834 *ma k^ha ŋja* *zo to-βzu-nui*.
 LNK house completely EMPH IFR-make-PL
 18835 ‘They removed all the fields in Temgri, and built houses there (instead).’
 18836 (140522 kAmYW tWji2, 18)

16.1.3.3 Possessive prefixes

18838 Possessive prefixes on oblique participles are optional, though their presence is
 18839 preferred in careful speech.

18840 With intransitive verbs, the possessive prefix refers to the subject, as *a-syz-nyri*
 18841 ‘the place where I stay’ in (104).

- 18842 (104) *a-ky-ndza* *ri yyzu,* *a-syz-ryzi* *ri*
 1SG.POSS-OBJ:PCP-eat also exist:SENS 1SG.POSS-NMLZ:oblique-stay also
 18843 *yyzu q^he*
 exist:SENS LNK
 18844 ‘(There), I have food to eat and a place to stay.’ (150831 renshen wawa,
 18845 24)

18846 With transitive verbs, the possessive prefix can be coreferent with the object.
 18847 For instance, in (105), the plural *nui-* on *nui-sy-tšuβ* refers to the many types of
 18848 clothes and shoes mentioned just before in the same text.

- 18849 (105) *nust^hamt₃yut yui nui-sy-tšuβ* *nui tu-ŋgru*
 so.many GEN 3PL.POSS-NMLZ:oblique-sew DEM INDEF.POSS-sinew
 18850 *tu-sui-βzu-nui.*
 IPFV-CAUS-make-PL
 18851 ‘People use sinew to sew that many (types of clothes and shoes).’
 18852 (150906 tWNgru, 17)

18853 However, it is also possible for the possessive prefix to be coreferent with the
 18854 subject. This is particularly common when the subject is first or second person,
 18855 and no overt object is present, as *ny-sy-ta* ‘the place where you put it’ in (106).

- 18856 (106) *kuucte nutcu ny-sy-ta* *me* *úi-ŋu*
 other DEM:LOC 2SG.POSS-OBL:PCP-put not.exist:FACT QU-be:FACT
 18857 ‘Isn’t there any other place where you put (the food)?’ (meimei de gushi,
 18858 72)

18859 There is no person hierarchy in slot accessibility to the possessive prefix how-
 18860 ever; in (107), the possessive prefix on *nu-sy-ntc^hoz* marks the subject, although
 18861 the object is first person plural.

- 18862 (107) *tce izora yuu nu-sy-ntc^hoz a-puu-tu tce nuu-tsum*
 LNK 1PL GEN 3PL.POSS-OBL:PCP-use IRR-IPFV-exist LNK SENS-be.grateful
 18863 ‘We are glad that (some) of us have an opportunity to be useful to them.’
 18864 (conversation, 140510)

18865 When the object is overt (§16.1.3.2), it is rare to put a first or second person pos-
 18866 sessive prefix coreferent with the subject on the participle. Rather, a possessive
 18867 prefix occurs on the object, as in (108) and (109), as if *k^hutsa sy-rku* ‘place where
 18868 one puts the bowls’ and *mbryz sy-rku* ‘rice container’ were compounds.

- 18869 (108) *tce tce ji-k^hutsa sy-rku yuu uu-ηguu nuu,*
 LNK LNK 1PL.POSS-bowl OBL:PCP-put.in GEN 3SG.POSS-inside DEM
 18870 <*chouchou*> *uu-ηguu puu-nnuu-ηu, nuu kuuma^h nura*
 drawer 3SG.POSS-inside PST.IPFV-AUTO-be DEM other DEM:PL
 18871 *puu-nnuu-ηu kuny maka, laxtc^ha ky-rku me,*
 PST.IPFV-AUTO-be also at.all thing OBJ:PCP-put.in whether
 18872 *ky-ndza ky-rku me, nura tu-ndze ny tu-ndze,*
 OBJ:PCP-eat OBJ:PCP-put.in whether DEM IPFV-eat[III] LNK IPFV-eat[III]
 18873 ‘Whether it was in the cupboard where we put (our) bowls, in the
 18874 drawers or elsewhere, whether it was things put in there or food, (the
 18875 mice) ate/gnawed it again and again.’ (150831 BZW kAnArRaR, 5)

- 18876 (109) *nuu syzny a-mbryz sy-rku a-puu-ηu pur-ra*
 DEM COMP 1SG.POSS-rice OBL:PCP-put.in IRR-IPFV-be SENS-be.needed
 18877 ‘Why don’t I use (this basin) as a rice container?’ (150831 jubaopen-zh,
 18878 27)

18879 Using the possessive on the verb is never preferred, but appears to be grammati-
 18880 cal in elicitation in negative existential constructions, thus next to (110a), (110b)
 18881 is also possible.

- 18882 (110) a. *izo ji-khutsa sy-ta me.*
 1PL 1PL.POSS-bowl OBL:PCP-put not.exist:FACT
 18883 b. *izo k^hutsa ji-sy-ta me*
 1PL bowl 1PL.POSS-OBL:PCP-put not.exist:FACT
 18884 ‘We don’t have any place to put the bowls.’ (elicited)

16 Non-finite verbal morphology

If the object is an inalienably possessed noun, it can be alienabilized (§5.1.2.9). For instance, the 1PL possessive form of *tuu-ŋga sr-χtci* ‘washing machine’ can be either (111a) with alienabilization or (111b) without it.

- (111) a. *ji-tuu-ŋga sr-χtci*
1PL.POSS-INDEF.POSS-clothes OBL:PCP-wash
b. *ji-ŋga sr-χtci*
1PL.POSS-clothes OBL:PCP-wash

‘Our washing machine’ (111a heard in context, 111b elicited)

16.1.3.4 Polarity and orientation preverbs

Unlike subject and object participles, the only prefixes (other than possessive prefixes) that oblique participles can take are the polarity prefixes and series B orientation preverbs.

It is thus not possible to have perfective or past imperfective oblique participles, and alternative strategies are used to express the corresponding meanings. For instance, from the verb *sqa* ‘cook’, the form *†uu-puu-sr-sqa* (intended meaning: ‘the thing that has been used to cook’) is incorrect, and the solution to circumvent this morphological constraint is to combine the plain oblique participle *uu-sr-sqa* with *pui-kuu-ŋju* (the past imperfective subject participle of *ŋju* ‘be’) and with the phrase *nua cuŋguu* ‘before that’, as in (112).

- (112) *nua cuŋguu uu-sr-sqa pui-kuu-ŋju uu-ŋguu*
DEM before 3SG.POSS-OBL:PCP-COOK PST.IPFV-SBJ:PCP-be 3SG.POSS-inside
(*tu-rku-nua*)
IPFV-put.in-PL
(‘They put it in the (pan) that had been used before to cook (the barley grains).’ (31-cha, 64))

Negative forms of the oblique participle are not very common, but examples are found in the corpus (as in 113) and there is no difficulty to elicit them.

- (113) *qazmbri nua, nskinua, uu-sr-pe ra me,*
vine DEM FILLER 3SG.POSS-OBL:PCP-be.good PL not.exist:FACT
uu-mx-sr-pe ra me,
3SG.POSS-NEG-OBL:PCP-be.good PL not.exist:FACT
(‘The vine is neither an advantage nor a harm (to the plants on which it grows).’ (06-qaZmbri, 17))

18912 16.1.3.5 Locative relative clauses

18913 The oblique participle can be used to build many different types of relative clauses, with various non-core arguments and adjuncts as relativized elements, including locative, temporal, instrumental adjuncts and dative arguments. The most common ones are the locative relative clauses.

18917 With motion verbs like *ce* ‘go’ or verbs of manipulation, the relativized element
 18918 can be either the goal (place towards which the motion is conducted, as in (114)),
 18919 or the path through which the motion event takes place: in (115) for instance, the
 18920 head *tṣu* is a locative adjunct (‘the road through which one goes to X’) different
 18921 from the goal (the placename *prvcta*).

- 18922 (114) *ndzi-syx-ce* *nutcu* *jo-zyut* *tce*
 3DU.POSS-OBL:PCP-go DEM:LOC IFR-reach LNK
 18923 ‘(The ox) arrived at the place towards which the two of them were
 18924 going.’ (150826 shier shengxiao-zh, 86)
- 18925 (115) *[prvcta tṣu ku-syx-ce]* *nure* *ri* *tui-ji* *ci*
 TOPO path IPFV:east-OBL:PCP-go DEM:LOC LOC INDEF.POSS-field INDEF
 18926 *tce*, *nui* *cxŋgry rmi*.
 exist:FACT LNK DEM TOPO be.called:FACT
 18927 ‘On the road (one has to go through to reach) Prashta there is a field, it
 18928 is called Kyangag.’ (140522 kAmYW tWji, 116-117)

18929 In (116), the oblique participle designates the areas in which the subject (a plant)
 18930 grows, without a specific goal.

- 18931 (116) *pxjka* *wuma zo* *a-pui-pe*, *tce* *w-syx-ce*
 pumpkin really EMPH IRR-IPFV-be.good LNK 3SG.POSS-OBL:PCP-go
 18932 *nura* *a-pui-dyn* *w-syz-nyctuče*
 DEM:PL IRR-IPFV-be.many 3SG.POSS-OBL:PCP-go.around
 18933 *a-pui-dyn* *tce*, *pxjka* *tui-pʰw* *w-taš* *nutcu*
 IRR-IPFV-be.many LNK pumpkin ONE-tree 3SG.POSS-on DEM:LOC
 18934 *kuβdysqi jamar*, *w-mat* *ku-tsʰob* *jui-cʰa*
 fourty about 3SG.POSS-fruit IPFV-attach SENS-can
 18935 ‘When the pumpkin (grows) well, and when there are a lot of (places on)
 18936 which it can spread, one plant can have about fourty pumpkin.’
 18937 (16-CWrNgo, 96)

18938 The relativized locative adjunct can also be the place of origin rather than the
 18939 goal in the case of the verb *yi* ‘come’ as in (117).

- 18940 (117) *izora nuu ji-sy-yi* *nautcu pjy-ηu* *tce.*
 1PL DEM 1PL.POSS-OBL:PCP-come DEM:LOC IFR.IPFV-be LNK

18941 ‘The place from where we come was there.’ (2010-06, 3)

18942 With stative verbs or dynamic verbs implying no motion, the oblique participle
 18943 has a static locative meaning, as in (118).

- 18944 (118) *tx-tcui* *tc^heme tui-sy-ymdzuu* *zaka tu.*
 INDEF.POSS-son girl INDEF.POSS-OBL:PCP-sit each exist:FACT
 18945 ‘Gents and ladies each have their (own specific) sitting place.’
 18946 (31-khAjmu, 10)

18947 Participial locative relative clauses are used to describe non-transient properties
 18948 of places: directions, locations or places of origin that are unchanging characteristics
 18949 of things or persons (115 and 117), places where some state of affair
 18950 generally occurs due to a natural law (116 and 128) or places used for a specific
 18951 purpose, as in (118), and even more clearly in (119) with the property noun *w-rkoz*
 18952 ‘special’ (§16.5.1).

- 18953 (119) *tce saŋdi* *nuu tce, nuunu si*
 LNK lower.side.of.the.hearth DEM LNK DEM firewood
 18954 *wi-sy-ta* *wi-rkoz* *zo pjy-ηu.*
 3SG.POSS-OBL:PCP-put 3SG.POSS-special EMPH IFR.IPFV-be
 18955 ‘The lower side of the hearth was specifically where (people) put
 18956 firewood.’ (2011-11, 33)

18957 For transient properties of places, finite relatives are used instead (§23.5.5.1). In
 18958 example (120) translated from Chinese,⁶ Tshendzin hesitates between a participial relative
 18959 (implying that there was a specific place where the sky goddesses put
 18960 their clothes each time they came to earth) and a finite relative (suggesting that
 18961 they put their clothes in some unspecific place, perhaps in a casual way as the
 18962 autive *-nuu-* could indicate, §19.1).

- 18963 (120) *tc^hemypuu nura, [nuu-ŋga sy-ta]* *nautcu ko-ce,*
 girl DEM:PL 3PL.POSS-clothes OBL:PCP-put DEM:LOC IFR:EAST-go
 18964 *[nuu-ŋga na-nuu-ta-nuu]* *nautcu ko-ce matci,*
 3PL.POSS-clothes AOR:3→3'-AUTO-put-PL DEM:LOC IFR:EAST-go LNK
 18965 ‘He went to the place where the girls put their clothes, where they had
 18966 put their clothes.’ (150828 niulang-zh, 59)

⁶The original text has走到仙女们放衣服的地方 <zǒu dào xiānnǚmen fàng yīfú de dìfāng> ...went to the place where the sky goddesses put/had put their clothes'; both interpretations are possible.

18967 Locative participial relative clauses with overt head can be prenominal, in par-
 18968 ticular with genitival relatives as in (121).

- 18969 (121) *pjy-nukualu-nuu ma sy-nui-ce yuu ui-tsuum nuu*
 IFR-be.lost-PL LNK OBL:PCP-VERT-go GEN 3SG.POSS-path DEM
 18970 *mui-jy-nui-mto-nuu.*
 NEG-IFR-AUTO-see-PL
 18971 ‘They were lost, and could not find the way back home.’ (160630 poucet1,
 18972 55)

18973 However, head-internal relatives are also attested: in (115) above and (122), the
 18974 head of the participial relatives, the noun *tṣu* ‘road’, occurs between the verb in
 18975 oblique participle form and a place name marking the goal. Note in addition that
 18976 (122) illustrates two locative oblique participial relative clauses embedded within
 18977 another participial relative.⁷

- 18978 (122) *[[rpvnguu tṣu lu-syx-ce] c^ho [prvsc^huu tṣu*
 TOPO path IPFV:UPSTREAM-OBL:PCP-go COMIT TOPO path
 18979 *lu-sy-yi] jui-sy-nui-NGyt]*
 IPFV:UPSTREAM-OBL:PCP-come IPFV:WEST-OBL:PCP-AUTO-ACaus:separate
 18980 *nuitcu,*
 DEM:LOC
 18981 ‘At the place where the road towards Rpangu and the road towards
 18982 Praskhyu separate.’ (140522 kAmYW tWji2, 125)

18983 16.1.3.6 Instrumental relative clauses

18984 Another very productive type of oblique participial relatives are the instrumental
 18985 relative clauses (§23.5.6). Although instruments, like transitive subjects, receive
 18986 ergative case (§8.2.2.4), they are usually relativized with oblique participles.

18987 There is often ambiguity between instrument relativization and locative ad-
 18988 junct relativization; for instance, while the participle *w-z-ry-ryt* can mean ‘pen
 18989 (the tool used to write)’ as in (123), this form can also designate the paper on
 18990 which one writes or even one’s office.

⁷In (122), the orientation preverbs reflect the basic meanings of the tridimensional system (§15.1.3).

16 Non-finite verbal morphology

- 18991 (123) *w-slamax̚ti* *nua yuu, [w-z-ry-ryt]* *ci*
 3SG.POSS-classmate DEM GEN 3SG.POSS-OBL:PCP-APASS-write INDEF
 18992 *to-nu-ndo* *tce jo-nu-tsum* *jnu-ŋu tce,*
 IFR-AUTO-take LNK IFR-VERT-take.away SENS-be LNK
 18993 ‘He took away the pen of a classmate.’ (2014-tou dongxi de xiaohai-zh, 5)

18994 Instrumental relative clauses built with oblique participles can occur as objects
 18995 of the causativized verb *suu-βzu* ‘cause to make; use X to make’, as in (124).

- 18996 (124) *nunuu [tuutʰuu sr-χtci],* *[tua-ŋga* *sr-pciz]* *nura*
 DEM pan OBL:PCP-wash INDEF.POSS-clothes OBL:PCP-wipe DEM:PL
 18997 *tu-suu-βzu-nuu* *pua-ŋgryl.*
 IPFV-CAUS-make-PL PST.IPFV-be.usually.the.case
 18998 ‘People used to employ (Usnea) as tools to wash pans or wipe clothes.’
 18999 (20-sWrna, 151)

19000 In this construction, the material used to make the tool is marked with the
 19001 ergative (§8.2.2.4), as in (125).

- 19002 (125) *ununuu kuu [w-sr-čmi]* *tu-suu-βzu-nuu*
 DEM ERG 3SG.POSS-OBL:PCP-mix IPFV-CAUS-make-PL
 19003 *pua-ŋgryl*
 PST.IPFV-be.usually.the.case
 19004 ‘People used to employ it (a boat oar) to mix it (the alcohol).’ (31-cha, 45)

19005 Oblique participles are used to make instrumental relative clauses, used like
 19006 nouns of instruments, from both transitive and intransitive verbs. If the base
 19007 verb is transitive, the participle retains its transitivity: thus in (125), the absence
 19008 of object in the one-word relative clause *w-sr-čmi* ‘the tool used to mix it’ is
 19009 the result of zero-anaphora, and implies a definite object. Instrumental relative
 19010 clauses with a transitive verb more often have an overt object, as in (124). For
 19011 indefinite objects, antipassivization is necessary, as in *w-z-ry-ryt* ‘the tool used to
 19012 write’ in (123) above (see also §16.1.3.2).

19013 The relativized instrument need not be an entity, but can also be an action. For
 19014 instance, in the pseudo-cleft (126), what is referred to by the participial relative
 19015 is the infinitival clause *myvym kyr-pʰaꝝ.*

- 19016 (126) *qajdo [u-rzaβ u-cki u-svz-nurmyzu] nur*
 crow 3SG.POSS-wife 3SG.POSS-DAT 3SG.POSS-OBL:PCP-show.off DEM
 19017 *mjym kx-p^ha_s pjy-ηu*
 type.of.tree INF-chop IFR.IPFV-be
 19018 ‘What he was showing off with in front of his wife was chopping the
 19019 wood of the *mjym* tree (which is easy to cut).’ (11-mYAm, 24)

19020 **16.1.3.7 Other oblique relative clauses**

19021 In addition to goals, locative adjuncts and instruments, oblique participles are
 19022 used to relativize various other types of arguments and adjuncts, though those
 19023 cases are considerably less common in the corpus.

19024 Dative arguments (in *u-cki* or *u-p^he*, §8.3.1) are relativized with an oblique par-
 19025 ticle (§23.5.8), as is shown by (127), where the verb *fçrt* ‘tell’ also occurs as the
 19026 main verb of the second clause with an overt recipient marked with the dative.

- 19027 (127) *[u-sv-fçrt] pjy-me q^he tce tv-pvtsø*
 3SG.POSS-OBL:PCP-tell IPFV.IFR-not.exist LNK LNK INDEF.POSS-child
 19028 *u-cki nur tcu nura tc^hi puu-kui-fse nura pjy-fçrt.*
 3SG-DAT DEM LOC DEM:PL what PST-SBJ:PCP-be.like DEM:PL IFR-tell
 19029 ‘She had no one (else) to tell it to, so she told the boy everything that
 19030 had happened.’ (140515 congming de wusui xiaohai-zh, 77)

19031 Likewise, comitative phrases in *c^ho* (§8.2.5) and occurring with verbs with in-
 19032 trinsically non-singular subjects (§14.2.6), are relativized with an oblique partici-
 19033 ple. For instance, the participle *u-sv-ymumi* in (128) is a headless relative meaning
 19034 ‘those with whom it is in good terms with’.

- 19035 (128) *tce uzo [u-sv-ymumi] nur dvn ma*
 LNK it 3SG.POSS-OBL:PCP-be.in.good.terms DEM be.many:FACT because
 19036 *ca kui-fse qazo kui-fse, ts^hyt kui-fse,*
 musk.deer OBL:PCP-be.like sheep OBL:PCP-be.like goat OBL:PCP-be.like
 19037 *uzo c^ho kui-naxtcuy suijno, xcaj ma my-kui-ndza*
 it with OBL:PCP-be.identical herbs grass apart.from NEG-OBL:PCP-eat
 19038 *nur ra c^ho nur amumi-nur tce,*
 DEM PL with DEM be.in.good.term:FACT-PL LNK
 19039 ‘The (animals) that are in good terms with the rabbit are many, it is in
 19040 good terms with those that only eat grass, like musk deer, sheep or
 19041 goats.’ (04 qala1, 33-4)

19042 Time adjuncts are also possibly relativized using oblique participles, as *w-sy-ji*, which means ‘the period when it is planted’ in (129). However, finite relative
 19043 clauses are the preferred way of relativizing time adjuncts (§23.5.9). As in the case
 19044 of locative relative clauses (§16.1.3.5), participial relative clauses are only used to
 19045 refer to specific dates and time periods that are intrinsic properties of the event.
 19046

- 19047 (129) *tce nunu zaka [w-sy-ji] pui-ŋu tce*
 LNK DEM each 3SG.POSS-OBL:PCP-plant SENS-be LNK
 19048 ‘These are the (periods) when people plant each of these (crops).’ (15
 19049 tChWma, 19)

19050 Temporal relative clauses are generally headless, but (130) shows an example
 19051 of head-internal (or postnominal) relative clause, with *skyrma* ‘minute, date’ as
 19052 its head noun. In addition, this participial relative has here a superlative interpre-
 19053 tation (§26.4.2).

- 19054 (130) *lysyr χsum w-ranj tce, tuxpalskyr yu, nykinu, [skyrma*
 new.year three 3SG.POSS-time LOC whole.year GEN FILLER date
 19055 *w-sy-sna] ŋu tu-kur-ti ŋu.*
 3SG.POSS-OBL:PCP-be.good be:FACT IPFV-GENR-say be:FACT
 19056 ‘We say that the third day of the year is the (most) auspicious day in the
 19057 whole year.’ (2010-10, 143)

19058 A further derived meaning of the oblique participle is that of ‘opportunity to
 19059 do X’, as in (131) and (107) above.

- 19060 (131) *tce [syz-nunŋgra] ɣyzu ri, li syzuar*
 LNK OBL:PCP-earn.wages exist:SENS LNK again be.dangerous:FACT
 19061 ‘Although it (provides) an opportunity to earn wages, it is also
 19062 dangerous.’ (conversation 140510)

19063 Even in context, the exact meaning of a particular oblique relative clause may
 19064 allow some leeway in interpretation. For instance, the participle *ji-sy-če* in the
 19065 negative existential construction in (132) could be understood as a locative rela-
 19066 tive clause ‘(we had no) place to go’ but also alternatively as ‘(we had no) oppor-
 19067 tunity to go (anywhere)’ in this particular context.

- 19068 (132) *izora tce k^ha w-ŋgw* *ky-ky-ja zo*
 1PL LNK house 3SG.POSS-inside AOR-OBJ:PCP-close EMPH
 19069 *jw-fse-j ku-ryzit-i ma [ji-syx-ce] maye*
 SENS-be.like-1PL IPFV-stay-1PL LNK 1PL.POSS-OBL:PCP-go not.exist:SENS
 19070 'We were like locked in the house, with nowhere to go.' (140501 tshering
 19071 skyid, 116)

16.1.3.8 Causative

19073 The oblique participles can occur as object of the verb *βzu* 'make', with a pur-
 19074 posive (133) or causative (134) interpretation. These meanings derive from the
 19075 instrumental nominalizing uses of the oblique participle.

- 19076 (133) *tui-ji wu-rkua ra tx-yur pjui-ta-nuu tce,*
 INDEF.POSS-field 3SG.POSS-side PL INDEF.POSS-fence IPFV-put-PL LNK
 19077 *fsapas wu-my-syx-ce tu-βzu-nuu*
 animals 3SG.POSS-NEG-OBL:PCP-go IPFV-make-PL
 19078 *ŋgryl*
 be.usually.the.case:FACT
 19079 'They put a fence around the fields, so as to prevent domestic animals to
 19080 go there.' (140427 qamtsWrmdzu, 14)

19081 In (133), the phrase *fsapas wu-my-syx-ce* can be interpreted as '(something made
 19082 so) that animals do not go (there)', while in (134) *rgargun nunuu w-sy-βju~βjit*
 19083 means '(something used to) remind the old man'.

- 19084 (134) *tc^heme kuu-ŋyn nuu kuu icq^ha nuu, rgargun nunuu*
 woman SBJ:PCP-be.evil DEM ERG FILLER DEM old.man DEM
 19085 *wu-sy-βju~βjit to-βzu tce,*
 3SG.POSS-OBL:PCP-EMPH~remember IFR-make LNK
 19086 'The evil woman reminded the old man.' (140515 jiesu de laoren-zh, 128)
 19087 *tu-ky-su-βjit ftçaka to-βzu*

16.1.3.9 Ambiguity

19088 The various allomorphs of the oblique participle do resemble other prefixes found
 19089 in Japhug. The *sy-* and *syy-* allomorphs are also found with the proprietive derivation
 19090 (§18.8), and *sy-* is also similar to the human antipassive, or the sigmatic cau-
 19091 sative of *a-* initial verbs (§12.3). Finally, the *z-* allomorph of the oblique participle
 19092

19093 can resemble the causative (§17.2.1.1) or one allomorph of the translocative prefix
 19094 (§15.2.1.2).

19095 However, unlike subject (§16.1.1.3) and object (§16.1.2.3) participles, these sur-
 19096 face ambiguities are only very superficial, as the forms with which the oblique
 19097 participle could potentially be confused are all finite, and hardly ever occur in
 19098 the same syntactic context as the oblique participle (and except for their bare in-
 19099 finitive form, in the case of transitive verb, never occur with a possessive prefix).

19100 In the case of the *z*- allomorph of translocative prefix, note that it only occurs
 19101 before a few orientation preverbs (*nui-*, *jv-*, *ju-*, *jv-*, *jo-*, *ja-*), whereas the oblique
 19102 participle *z*- can only follow an orientation preverb, as in *w-c^hu-z-ravruz* in (135),
 19103 so that the two forms can never be confused.

19104	(135)	<i>nunuu yuu w-c^hu-z-ravruz</i>	<i>nui</i>
		DEM GEN 3SG.POSS-IPFV:DOWNSTREAM-OBL:PCP-Sweep DEM	
19105		<i>u-sy-pciz</i>	<i>rmi</i>
		3SG.POSS-OBL:PCP-wipe	be.called:FACT

19106 '(The tool used to) sweep (the flour) is called a “wiper”. (06-BGa, 216)

16.1.3.10 Lexicalized oblique participles

19107 Nouns of instruments and of location, including placenames, are often made from
 19108 oblique participles.

19109 The noun *sycu* ‘key’, although transparently originating from the instrumental
 19110 use of the oblique participle of *cu* ‘open’, is lexicalized as shown by the fact that
 19111 it cannot take orientation preverbs, and that it occurs in collocation with the
 19112 auxiliary *lvt* to mean ‘lock (the door)’ as in (136).

19114	(136)	<i>w-ŋguu</i>	<i>ly-yi</i>	<i>jyy</i>	<i>ma sycu</i>
		3SG.POSS-INSIDE	IMP:UPSTREAM-COME	BE.ALLOWED:FACT	LNK key
19115		<i>mr-a-lvt</i>			

19116 NEG-PASS-throw

19117 'Come in, the door is not locked.' (140428 xiaohongmao-zh, 78)

19118 Place names built from oblique participle include *Znryryma*, from the locative
 19119 participle *z-nryryma* of the verb *nryryma* ‘pray for rain’ (probably a denominational
 19120 verb from a compound **ryryma* based on *tui-ryi* ‘seed’ and *ta-ma* ‘work’, §20.7.1),
 19121 as it was the place where people used to perform this activity in Kamnyu in the
 19122 traditional society, as explained in §18.6.7.3.

19122 Another example is the uninhabited place called *kulrysymdzuu*, a transparent
 19123 combination *ku-lry* ‘shepherd’ (§16.1.1.7) and *u-sr-ymdzu* ‘sitting place’ reflecting
 19124 the use of this place (as described in 137).

- 19125 (137) *kui-xtciu~xtci ci zo antym, tce nu*
 INF:STAT-EMPH~be.small a.little EMPH be.flat:FACT LNK DEM
 19126 *kui-lry ra nuateu ku-ryzi-nu pjx-ηgryl*
 SBJ:PCP-graze PL DEM:LOC IPFV-stay-PL IFR.IPFV-be.usually.the.case
 19127 ‘(The place called *kulrysymdzuu*) is a bit flat, and shepherd used to stay
 19128 there.’ (140522 Kamnyu zgo, 281)

19129 There are also case of nouns of instruments in *sr-* whose base verb is not identi-
 19130 fiable. For instance, the noun *srctcuy* ‘strap to carry children on the back’, which
 19131 is glossed using an oblique participle as in (138), is most certainly a frozen oblique
 19132 participle, but there is no verb **ctcuy* in Japhug.

- 19133 (138) *tr-pytso ui-srz-burwa*
 INDEF.POSS-child 3SG.POSS-OBL:PCP-carry.on.the.back
 19134 ‘Something used to carry children on the back’ (definition given for the
 19135 noun *srctcuy*)

19136 Some nouns originating from lexicalized participles have an irregular *s-* allo-
 19137 morph (Table 16.4). Their antiquity is shown by the existence of exact cognates
 19138 in Tangut (Jacques 2014c: 49;299) and Khroskyabs (Lai 2017: 514; 580). All three
 19139 nouns are used as relators in relative clauses (§23.2.4, §23.5.5.3), and *u-spa* ‘ma-
 19140 terial’ additionally occurs to build a type of purposive clauses (§25.5.4).

Table 16.4: Examples of fossilized oblique participles in *s-*

Noun	Base verb	Tangut	Khroskyabs
<i>u-spa</i> ‘material’	<i>pa</i> ‘do’		= <i>spi</i>
<i>u-stu</i> ‘place’	<i>tu</i> ‘exist’	𢃠 ⁵¹⁶⁵ <i>twu</i> ^{1.58}	
<i>u-sta</i> ‘place’	<i>ta</i> ‘put’	𢃡 ⁵⁶⁴⁵ <i>tji</i> ^{2.60}	

19141 In addition from the general meaning of ‘place’, the nominal stem *-sta* has three
 19142 highly specific meanings: *tu-sta* ‘bed’, *tr-sta* ‘designated place (for burying a dead
 19143 person)’ and *u-sta* ‘habit, state’, a complement-taking noun (§24.6.3.1) always
 19144 selecting a third singular possessor, used in particular in a collocation meaning
 19145 ‘return to one’s previous state, recover (from a disease)’ with *fse* ‘be like’, as in
 19146 (139).

19147	(139)	<i>ki</i>	<i>u-byri</i>	<i>kur-fse</i>	<i>nur u-sta</i>	<i>zo</i>
		DEM.PROX	3SG.POSS-before	SBJ:PCP-be.like	DEM 3SG.POSS-state	EMPH
19148		<i>pua-nui-fse</i>		<i>ny</i>		
		PST.IPFV-AUTO-be.like	ADD			

19149 ‘She had become again like she was before.’ (2003 Kunbzang, 484)

19150 More speculatively, it is possible that other allomorphs of the oblique nomi-
 19151 nization are preserved in some nouns, even when the base is lost. For example,
 19152 *zmbbru* ‘boat’ might be the lexicalized participle of a verb **mbru* ‘float’ (cognate
 19153 of 漂 *bjuw* ← **m.b(r)u* ‘float’, Zhang et al. 2019) with a fronted *z*- allomorph (like
 19154 that of the sigmatic causative, §17.2.2.4).

19155 An even more pronounced type of lexicalization occurs when an oblique par-
 19156 ticiple becomes member of a compound with *status constructus* vowel alterna-
 19157 tion. In these cases, it is probable that the compound is genitival, rather than a reduced
 19158 relative clause.

19159 As first element of compound, we find the oblique participle *u-sr-qru* (from
 19160 the verb *qru* ‘greet, welcome, receive’) in *status constructus* combined with the
 19161 noun *cʰa* ‘alcohol’ into *srqrvcʰa* ‘alcohol to treat the guests’ (§5.5.1.1). There are
 19162 also cases of undetectable *status constructus*, as in *srŋgungja* ‘bed cover’ from the
 19163 oblique participle of *rŋgu* ‘lie down’ and the inalienably possessed noun *tu-ŋga*
 19164 ‘clothes’: since the first element of this compound *sr-rŋgu* ends in *-u*, it would
 19165 not have a different bound form.

19166 Oblique participles are also attested as second element of compounds from
 19167 both transitive and intransitive verbs.

19168 As an example of lexicalized participle from an intransitive verb, the com-
 19169 pound *tsysyngxt* ‘crossroad’ combines the participle *u-sr-NGxt* ‘place where X
 19170 part ways’ from the anticausative verb *NGxt* ‘part ways, part company’) with the
 19171 *status constructus* of the noun *tsu* ‘path’, from an earlier locative participial rela-
 19172 tive **tsu u-sr-NGxt* ‘the place where roads separate’.

19173 With a transitive verb, we find the noun *þyrsyrpt* ‘watermill valve’, from an
 19174 earlier instrumental relative **þya u-sr-pryt* ‘the tool used to stop (water) in the
 19175 mill’ from the *status constructus* *þyrs-* of *þya* ‘watermill’ combined with the oblique
 19176 participle *u-sr-pryt* of the verb *pryt* ‘break, stop’. With undetectable *status con-*
 19177 *structus*, we have for instance *pʰusyti* ‘below’ from the onomatopoeia *pʰuu* and
 19178 the oblique participle of *ti* ‘saying’, literally ‘the tool used to make ‘pff’ sound’.

19179 The noun *tresyntçutxrt* ‘joke’ is an example of compound without *status con-*
 19180 *structus* on the first element. It comes from the reduplicated oblique participle
 19181 of the verb *tçrt* ‘take out’, which occurs in collocation with the inalienably pos-

19182 sessed noun *ty-re* ‘laugh (n)’ to mean ‘mock’, as in (140). The original meaning of
 19183 this compound presumably was ‘something/someone to make fun of’.

- 19184 (140) *a-re ma-tu-tcxt*
 1SG.POSS-laugh NEG:IMP-2-take.out
 19185 ‘Don’t laugh at me!’ (elicited)

19186 In the lexicalized compound *tyresytcutçrt*, *ty-re* is alienabilized (§5.1.2.9); this
 19187 noun occurs in collocation with the verb *βzu* ‘make’ or the causative *sufβzu* ‘cause
 19188 to make’ in the sense of ‘joke’. It can specifically mean ‘mock’, in which case the
 19189 compound *tyresytcutçrt* takes a possessive prefix coreferent with the *subject* of
 19190 *βzu* (the person making the joke, not the object of mockery), as shown by the
 19191 presence of the third dual possessive prefix *ndzi-* in (141) and the second singular
 19192 *ny-* in (142).

- 19193 (141) *wi-pi bnuz ni kumy ts^burjum zo, nykinu,*
 3SG.POSS-elder.sibling two DU also often EMPH FILLER
 19194 *pjú-wy-yy-k^he tce ndzi-tyresytcutçrt ra tu-βzu-ndzi*
 IPFV-INV-CAUS-be.stupid LNK 3DU.POSS-joke PL IPFV-make-DU
 19195 *pjy-nyu.*
 IFR.IPFV-be
 19196 ‘His two elder brothers often called him a stupid person and mocked
 19197 him.’ (140430 jin e, 11)
- 19198 (142) *ny-tyresytcutçrt ma-ty-kui-sui-βzu-a*
 2SG.POSS-joke NEG:IMP-IMP-2→1-CAUS-make-1SG
 19199 ‘Don’t mock me!’ (elicited)

19200 In these cases, the noun occurring as first element of the compound corre-
 19201 sponds to the object of the verb.

19202 The expression *syrma* ‘good night’ derives from the oblique participle of the
 19203 verb *rma* ‘stay the night, live’, and presents unusual morphological properties
 19204 (§14.7.1).

19205 16.2 Infinitives

19206 16.2.1 Velar infinitives

19207 The most common infinitives in Japhug are the velar infinitives, built from the
 19208 stem I of the verb and prefixed either with *kṛ-* or *ku-*; they are homophonous

19209 with participles (and historically related to them, §16.8.1) and not always easily
 19210 distinguishable from them (§16.2.1.1). They are in particular the preferred citation
 19211 form of the verbs (§16.2.1.4), though not with all speakers.

19212 The *kui-* infinitives are found with stative verbs (including adjectives and exis-
 19213 tential verbs), impersonal modal verbs and some anticausative verbs; other verbs
 19214 take the *ky-* infinitives. In Tshobdun, Sun (2014b: 235) reports that the *kə-* and *kn-*
 19215 infinitives (corresponding to *kui-* and *ky-* in Japhug) occur with non-human and
 19216 human arguments, respectively (in the case of dynamic verbs). It seems that this
 19217 criterion is not applicable to Japhug.

19218 Stative verbs in *a-* have regular fusion of *kui-* and *a-* as /*ky-/*, and thus superfi-
 19219 cially appear to have *ky-* infinitives (for instance, the infinitive of *arji* ‘be green’
 19220 is *kui-yrŋi* /*kyrŋi*/).

16.2.1.1 Infinitives vs. participles

19221 It is not immediately obvious that a category of ‘velar infinitives’ needs to be
 19222 distinguished from participles in Japhug, as both are non-finite verbal categories
 19223 prefixed in *ky-* or *kui-* (§16.1.2.3 and §16.1.1.3).

19224 The necessity to set *ky-* infinitives apart from object participles stems from
 19225 the fact that the latter can only be built from transitive or semi-transitive verbs,
 19226 while the former also occurs with strictly intransitive verbs. Thus, if one were to
 19227 argue that all *ky-*-prefixed non-finite forms of transitive verbs are object partici-
 19228 ples, including in the case of complement clauses (for instance *ky-ndza* in 143),
 19229 one would not be able to account for the *ky-*-prefixed forms of intransitive verbs
 19230 occurring in the same context such as *ky-ce* in (144) – even though *ce* ‘go’ could
 19231 be considered to be a kind of semi-transitive verb (since it can take a goal, which
 19232 can be relativized with a finite relative clause, §23.5.5.1), it is not possible to build
 19233 a participial relative clause by prefixing *ky-* on this verb (the oblique participle
 19234 *sy-* must be used instead, §16.1.3).

- 19235 (143) *azo ky-ndza muu-puu-rpo-t-a*
 19236 1SG ???-eat NEG-AOR-experience-PST:TR-1SG
 19237 ‘I never ate that.’ (many attestations)

- 19238 (144) *aj ky-ce muu-puu-rpo-t-a*
 19239 1SG INF-go NEG-AOR-experience-PST:TR-1SG
 19240 ‘I never went there.’ (150820 ZNGWloR, 4)

19241 I therefore adopt the following criteria to distinguish between a *ky-* infinitive
 19242 and an object participle: *ky-* non-finite forms of (non-semi-transitive) intransi-
 19243 tive verbs are infinitives; *ky-* non-finite forms of transitive and semi-transitive

19243 verbs occurring in the same contexts as the infinitives of intransitive verbs are
 19244 infinitives.

19245 By systematically applying these criteria, we can identify three contexts where
 19246 infinitives are attested: citation form (§16.2.1.4), complementation (§16.2.1.5; there
 19247 are however a few cases of object participles used in complement clauses, §16.1.2.6),
 19248 and manner converses (§16.2.1.7).

19249 Distinguishing between subject participles and *kuu*- infinitives in Japhug is less
 19250 straightforward, unlike in other Gyalrong languages such as Tshobdun for instance,
 19251 Sun 2014a, since even stative verbs take the *ky*- infinitive in complement
 19252 clauses (§16.2.1.5). The only clear contexts where *kuu*- infinitives do occur is that of
 19253 citation forms (§16.2.1.4) and complement clauses containing impersonal modal
 19254 verbs (§16.2.1.5). Converses in *kuu*- are analyzed as infinitives rather than subject
 19255 participle because they are only attested with stative verbs or other verbs taking
 19256 the *kuu*- infinitives (§16.2.1.7).

19257 16.2.1.2 Associated motion, polarity and orientation preverbs on infinitives

19258 With the exception of the construction in §16.2.1.6 and some conversial uses
 19259 (§16.2.1.7), *ky*- infinitives do not take possessive prefixes. However, like participles,
 19260 they are compatible with associated motion (145), negative prefixes (146)
 19261 (with double negation, §13.3) and B-type orientation preverbs (147), with combi-
 19262 nations of two prefixes.

- 19263 (145) *a-mgut̚r pñu-mñym tce c̚w-ky-χt̚w múaj-cʰa-a*
 19264 1SG.POSS-back SENS-hurt LNK TRAL-INF-buy NEG:SENS-can-1SG
 19265 ‘My back hurts and I cannot go to buy (apples).’ (conversation,
 30-04-2018)
- 19266 (146) *rjylpu fka cti tce, mx-ky-ce mx-kʰw*
 19267 king order be.AFF:FACT LNK NEG-INF-go NEG-be.possible:FACT
 ‘This is the king’s order, (I) have no choice but to go.’ (Norbzang 2005, 12)
- 19268 (147) *ty-se mu-pjua-ky-tob ftcaka tu-βze-a*
 19269 INDEF.POSS-blood NEG-IPFV-INF-come.out manner IPFV-make[III]-1SG
 19270 *tu-mdzoz-a pu-ŋu ma,*
 IPFV-avoid-1SG PST.IPFV-be LNK
 ‘I avoided by all means to let the blood come out.’ (24-pGArtsAG, 57)

19271 Negative infinitives take the allomorph *mx*- (as in 146), unless an imperfective
 19272 orientation preverb is present, in which case the negative is *muu*- as in (147).

- 19273 Impersonal and stative infinitives in *ku-* are only attested with the negative prefix *mr-*.
19274

19275 16.2.1.3 Ambiguity

Aside from the homophony between infinitives and participles discussed in §16.2.1.1, another type of ambiguity occurs with verbs selecting the orientation preverb EASTWARDS, whose A form is *kṛ-* (§15.1.1.1). Intransitive verbs in imperative singular and perfective third singular forms (for instance *kṛ-rjgu* ‘he laid down’) and transitive verbs without stem alternation in imperative singular (*kṛ-ts^{hi}* ‘drink!’, §21.4.2.1) have forms that are homophonous with the corresponding infinitives (*kṛ-rjgu* ‘to lie down’, *kṛ-ts^{hi}* ‘to drink’), but these cases are never really ambiguous, as it is trivial to distinguish between a finite verb form and a non-finite one, for instance by changing from singular to dual or plural.

For instance, in a particular context, if a form such as *kr-rygu* can be changed to the corresponding plural *kr-rygu-nu* (which can be either perfective AOR-lie.down-PL ‘they laid down’ or imperative ‘lie down!’), it is possible to conclude that this *kr-rygu* is necessarily finite (since non-finite verb forms in Japhug never take indexation affixes, §2.4.2.3) and cannot be an object participle or an infinitive.

19291 16.2.1.4 Citation form

The infinitive is the preferred form to refer to a verb in metalinguistic discourse as a citation form. In this context stative and impersonal verbs consistently take the *kua-* prefix as in (148), and the rest of verbs the *ky-* prefix, as in (149) and (150). Even in citation form, the infinitive verb can take orientation (150) and polarity prefixes (148).

- 19297 (148) *untunuu tce tce* [u-tuu-tsuβ] *mr-kuu-βdi]*
 DEM LNK LNK 3SG.POSS-NMLZ:ACTION-sew NEG-INF:STAT-be.good

19298 *tu-ku-ti* ηu
 IPFV-GENR:A-say be:FACT

19299 ‘People call this ‘badly sewn’.’ (12-kAtsxWb-zh, 12)

19300 (149) *pjuu-su-βndi* tce *pjuu-su-sat* tce *nua kóvmauz ny*
 IPFV-CAUS-hit[III] LNK IPFV-CAUS-kill LNK DEM only.after LNK

19301 *c^huu-nutsum* *pjuu-ra* tce *nunuu*
 IPFV:DOWNTSTREAM-take.away SENS-be.needed LNK DEM

- 19302 [k_r-ny_varph_vβ] tu-kui-ti ηu
INF-strike.with.wings IPFV-GENR:A-say be:FACT
19303 ‘It strikes it and kills it (with its wings) and only then takes it away. This
19304 is called *k_r-ny_varph_vβ* ‘strike with one’s wings’’ (150819 RarphAB-zh, 11)

19305 The infinitive is commonly used in metalinguistic discussions about collocations,
19306 and in those cases can appear together with intransitive subjects (148) or
19307 objects (150). In the latter, the focus is on the noun *u-k_vlyjme* ‘head upside down’
19308 (§5.7.8.3), the verb *ct^huz* ‘turn towards’ being present only because it is selected
19309 by *u-k_vlyjme*.

- 19310 (150) u-mju nuu pa pjú-wy-ct^huz tce nuu
3SG.POSS-mouth DEM down IPFV:DOWN-INV-turn.towards LNK DEM
19311 [u-k_vlyjme pjuu-k_r-ct^huz]
3SG.POSS-head.upside.down IPFV:DOWN-INF-turn.toward
19312 tu-kui-ti ηu.
IPFV-GENR:A-say be:FACT
19313 ‘One turns the mouth (of the container) downwards, it is called ‘to turn
19314 upside down’’ (30-macha, 68)

19315 The infinitive is not the only possible choice as a citation form; some speakers
19316 sometimes cite a generic form (especially with the imperfective, as *pjú-wy-ct^huz*
19317 in 150) or other finite forms (even imperatives).

19318 Outside of metalinguistic discourse, the stative/impersonal infinitive is also
19319 used as subject of adjectival stative verbs such as *pe* ‘be good’ as in (151), express-
19320 ing the meaning ‘the fact of ... is good’.

- 19321 (151) tce [[k_r-rvt] kui-k^hui] nuu tce tce juu-pe ma, tce
LNK INF-write INF:STAT-be.possible DEM LNK LNK SENS-be.good LNK LNK
19322 nuu t_v-scoz nuu pjuu-kui-ru juu-k^hui.
DEM INDEF.POSS-writing DEM IPFV-GENR:S/O-look SENS-be.possible
19323 ‘It is good to have the possibility to write (a language), because then one
19324 can look at the writing (to learn that language; otherwise, one has to
19325 learn just by listening). (150901 tshuBdWnskAt, 45)

19326 In the verb doubling construction, the infinitive of stative verbs can be neu-
19327 tralized to the *k_r*- form, as in (152) with an adjectival stative verb and (153) with
19328 the existential verb *tu* ‘exist’.

16 Non-finite verbal morphology

- 19329 (152) *ky-rzi* *ri pŷy-rzi*,
INF-be.heavy also IFR.IPFV-be.heavy
19330 ‘As for being heavy, (the old man) was heavy.’ (140511 xinbada-zh, 138)
- 19331 (153) *wzo rkun*, *ri ky-tu* *nua tu*
3SG be.rare:FACT LNK INF-exist DEM exist:FACT
19332 ‘It is rare, but as for existing, it does exist.’ (140511 qamtsWrmdzu, 17)

16.2.1.5 Complementation

19334 The most common function of the velar infinitive is to build complement clauses
19335 (§24.2.1). Apart from a handful of well-identified cases (§16.1.1.6), all *ky-* prefixed
19336 verb forms in complement clauses are infinitive rather than object participles
19337 (using the criteria in §16.2.1.1).

19338 Velar infinitives occur with a great variety of auxiliaries and other complement-
19339 taking verbs (§24.2.1) as well as a few complement-taking nouns (§24.6). Few
19340 verbs however require the infinite in complement clauses. Some complement-
19341 taking verbs like *cʰa* ‘can’ occur with either infinitival complement clauses as
19342 in (154) or finite complement clauses (§24.2.3), and other verbs like *rŋo* ‘expe-
19343 rience’ are compatible with both velar infinitives and bare infinitives (§16.2.3).
19344 The constraints on co-reference between the subject of the matrix verb and the
19345 participants of the complement clause is treated in §24.2.1.2.

- 19346 (154) *u-kyχcyl* *u-bru* *nua a-nua-pʰuit* *tce*
3SG.POSS-top.of.the.head 3SG.POSS-horn DEM IRR-PFV-take.out LNK
19347 *ky-nua-ce* *cʰa* *nua-cti*
INF-VERT-go can:FACT SENS-be.AFF
19348 ‘If one takes out the horn on his head, he will be able to go back (to
19349 heavens).’ (divination 2005, 91)

19350 Complex velar infinitive forms with polarity, orientation and associated mo-
19351 tion prefixes are attested in complement clauses, as in (155) (see also for instance
19352 145 and 146 in §16.2.1.2).

- 19353 (155) *azō [cui-ky-car]* *pui-rŋo-t-a.*
1SG TRAL-INF-search AOR-experience-TR:PST-1SG
19354 ‘I did go to search (for *Amanita caesarea*).’ (22-BlamajmAG, 32)

19355 Stative verbs, when occurring in a complement clause, generally take the *ky-*
19356 infinitive, as in example (156) and (157). The main verb of the complement clauses

19357 in these examples have the *kx-* infinitive, even though both *tu* ‘exist’ and *scit* ‘be
19358 happy’ are stative verbs and have a citation form with the *kuu-* prefix.

- 19359 (156) [a-rŋul *kx-tu*] *pua-rŋo-t-a*
1SG.POSS-money INF-exist PST:IPFV-experience-PST:TR-1SG

19360 ‘I used to have money.’ (elicited)

- 19361 (157) [*kx-scit*] *pjx-ŋgrw* *nui-ŋu*
INF-be.happy IFR-succeed SENS-be

19362 ‘She succeeded in being happy.’ (150818 muzhi guniang-zh, 6)

19363 The conversion to *kx-* infinitive only applies to stative verbs, not to impersonal
19364 modal verbs such as *ra* ‘have to, need’. When the latter occur in a complement
19365 clause, as in example (158), they always have the *kuu-* prefix.

- 19366 (158) [[*smyn* *kx-ndza*] *kuu-ra*]
medicine INF-eat INF:IMPERS-be.needed

19367 *pua-rŋo-t-a*
PST:IPFV-experience-PST:TR-1SG

19368 ‘I used to have to take medicine.’ (elicited)

19369 The velar infinitive is also found in some adnominal complement clauses, for
19370 instance in the collocation comprising the nouns *ftçaka* ‘manner’ or *kowa* ‘man-
19371 ner’ with the transitive verb *βzu* ‘make’ (§24.6.3.1), as (160) below (see also 147
19372 above).

19373 In infinitive complement clauses, the complement verb lacks person/number
19374 indexation. However, in the case of the verbs that require coreference between
19375 the core arguments of the matrix clause and those in the complement clause,
19376 the person and number of the subject (and sometimes also the object) of the
19377 complement clauses are reflected on the indexation of the verb in the matrix
19378 clause (§24.2.1.2). For instance, in (159), both the infinitive *kx-ti* ‘to say’ and the
19379 matrix verb *múj-spe-a* ‘I am not able’ share the same 1SG subject and 3SG object
19380 (*u-mdor* ‘its colour’).

- 19381 (159) *nui u-mdor* *nui aj* [*kx-ti*] *múj-spe-a*
DEM 3SQ.POSS-colour DEM 1SG INF-say NEG:SENS-be.able[III]-1SG
19382 ‘I don’t know how to say (describe) its colour.’ (06-qaZmbri, 05)

19383 This is also the case with noun+verb collocations taking complement clauses:
19384 in (160), the verb form *tú-wy-βzu* reflects the 3PL→2SG configuration of the infini-
19385 tive *kx-ndza* ‘to eat’ in the complement clause.

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- 19386 (160) *a-rfjt* *ra nur-yi-nur* *cti* *tcet^ha*,
1SG.POSS-children PL VERT-come:FACT-PL be.AFF:FACT in.a.moment
19387 *kx-ndza kowa* *tú-wy-βzu* *cti*
INF-eat manner 2-INV-make:FACT be.AFF:FACT
19388 'My children are coming back soon and will try to eat you.' (2012
19389 Norbzang, 300-301)

19390 With velar infinitive complements, some auxiliary verbs take the orientation
19391 preverb selected by the verb in the complement clause (§24.3.5).

16.2.1.6 Doubly prefixed velar infinitives with negative existential verbs

19393 The infinitive in *kx-* can take two prefixes in a construction combining the nega-
19394 tive existential verb *me* 'not exist' (§22.5.1.2) with a verb in the infinitive prefixed
19395 with a B-type orientation preverb and a possessive prefix coreferent with the
19396 subject,⁸ meaning 'have no way to X, be completely unable to X', as in (161) and
19397 (162). Note that since in both of these examples, the verbs are intransitive and lack
19398 an object participle, the *kx-* form can only be analyzed as an infinitive here. This
19399 construction is also possible with transitive verbs, in which case the possessive
19400 prefix corresponds to the transitive subject.

- 19401 (161) *tce ndzi-ju-kx-ce* *pjy-me*
19402 LNK 3DU.POSS-IPFV-INF-go IFR.IPFV-not.exist
19403 'They could not go.' (150908 menglang-zh, 46)
19404 (162) *tua-rzab nua u-pjui-kx-nuazuβ* *pjy-me* *matci*,
19405 one-night DEM 3SG.POSS-IPFV-INF-sleep IFR.IPFV-not.exist LNK
19406 'He could not sleep the whole night, because...' (150831 BZW kAnArRaR,
19407 12)

19408 A derived construction involves the causative *yŋme* 'cause not to exist, sup-
19409 press' with doubly prefixed infinitives to 'make it impossible for X to Y' as in
19410 (163).

- 19411 (163) *a-pjui-kx-nuazuβ* *na-yŋ-me*
19412 1SG.POSS-IPFV-INF-sleep AOR:3→3'-CAUS-not.exist
19413 'He made me unable to sleep.' (elicited)

19414 There is a variant of this construction with imperfective subject participles in
19415 *ku-* instead of infinitives (§16.1.1.6).

⁸The assertion in Jacques (2016a: 228) that infinitives cannot take possessive prefixes is thus wrong.

19413 16.2.1.7 Converbial function

19414 Velar infinitives in *kṛ-* can also be used as conversbs, in subordinate clauses that
 19415 are neither relatives nor complement clauses, with a variety of meanings.

19416 The most common function of converbial infinitives is similar to the gerund
 19417 (§16.6.1.3), expressing either the manner in which an action takes place (as in
 19418 164, 166 and 167) or describing an additional action occurring at the same time as
 19419 that referred to by the main verb (as *laxte^ha kṛ-fkur*, with an overt object, in 165)
 19420 (additional examples are presented in §25.4).

- 19421 (164) *kṛ-ṇke lṛ-ye-a*
 INF-walk AOR:UPSTREAM-come[II]-1SG
 19422 ‘I came on foot.’ (17-lhazgron, 12)

- 19423 (165) *nṛzo [laxte^ha kṛ-fkur] tu-tu-ṇke pñu-ṇu tce*
 2SG thing INF-carry.on.the.back IPFV-2-walk SENS-be LNK
 19424 ‘You are walking carrying things on your back.’ (150909 hua pi-zh, 12)

19425 Converbial infinitives also indicate the degree to which an action is under-
 19426 taken, as in the common expression *t^hi kṛ-c^ha zo* ‘do whatever X can to Y’ in
 19427 (166).

- 19428 (166) *[t^hi kṛ-c^ha] to-k-ṇndzut-ci ri, maka zo*
 what INF-can IFR-PEG-bark-PEG LNK completely EMPH
 19429 *kū-p^hyn pñy-me*
 SBJ:PCP-be.efficient IPFV.IFR-not.exist
 19430 ‘(The dog) barked as much as it could, but it was all for nothing.’ (140426
 19431 gou he qingwa-zh, 21)

19432 The conversbs can also be followed by adverbs of quantification like *ṣja* ‘com-
 19433 pletely’ (§22.2.2.1), as illustrated by (167).

- 19434 (167) *<kaihui> kū-fse t^h-ra tce, kṛ-ṇke ṣja zo*
 meeting SBJ:PCP-be.like AOR-be.needed LNK INF-walk completely EMPH
 19435 *ju-kū-ce pñu-ra.*
 IPFV-GENR:S/O-go PST.IPFV-be.needed
 19436 ‘When one had to (take part in) a meeting for instance, one had to go on
 19437 foot.’ (12-BzaNsa, 22)

19438 Infinitives in these functions can optionally be followed by the ergative *kū*,
 19439 like the gerunds (§16.6.1.3), as shown by (168).

- 19440 (168) *maka to-numbrypur-nuu tce li ky-ryuy kur zo jo-ce-nuu.*
 completely IFR-ride-PL LNK again INF-run ERG EMPH IFR-go-PL
 19441 ‘They mounted their horses and galloped away.’ (140512 alibaba-zh, 42)

19442 Unlike gerunds (§16.6.1.3), infinitive conversbs do not necessarily imply that
 19443 two different actions take place at the same time. In (167) and (168) for instance,
 19444 the conversbs *ky-ryke* and *ky-ryuy* do not express a motion event distinct from that
 19445 described by the main verb; rather, the verb *ce* ‘go’ indicates the direction and
 19446 deixis of the motion, while the conversbs specify the speed and manner of realiza-
 19447 tion of the action. Note that in this particular example, using the gerund is not
 19448 possible.

19449 The conversbial infinitives are attested with the negative prefix *my-*, meaning
 19450 ‘without Xing’, and generally refer to the way in which the action is performed
 19451 as in (169).

- 19452 (169) *maka my-ky-ruususo kur zo ‘jy’ to-ti, to-nyla.*
 at.all NEG-INF-think ERG EMPH be.allowed:FACT IFR-say IFR-agree
 19453 ‘She said ‘yes’, she agreed without thinking at all.’ (140429 qingwa
 19454 wangzi-zh, 67)

19455 Negative infinitive conversbs can have an adversative interpretation (§25.6.1.1).
 19456 In (170), *my-ky-rytuy* ‘not meeting’ expresses the non-realization of a telic event
 19457 that was the original purpose of the previous actions of the main referent.

- 19458 (170) *[a-mu a-wi ni my-ky-rytuy]*
 3SG.POSS-mother 3SG.POSS-grand.mother DU NEG-INF-meet
 19459 *kú-wy-sui-jyat-a-ndzi.*
 IPFV:EAST-INV-CAUS-go.back-1SG-DU
 19460 ‘(My uncles) forced me to go back (to school) without having met my
 19461 mother and my grandmother (even though I had not met...).’
 19462 (2010-Dpalcan-09, 54)

19463 Converbial infinitival clauses can contain an object or a semi-object which
 19464 does not belong to the main clause, as *a-mu a-wi ni* ‘my mother and my grand-
 19465 mother’ in (170). The dual on *kú-wy-sui-jyat-a-ndzi* refers to the subject (‘the uncles’,
 19466 mentioned in the previous clause), not the mother and the grandmother.

19467 In nearly all examples, there is subject (S/A) coreference between the matrix
 19468 clause and the conversbial clause, but examples like (170), where we rather observe
 19469 coreference between the *object* of the main clause and the subject of the subor-
 19470 dinate clause, shows that there is no syntactic constraint on subject coreference
 19471 in this construction.

19472 Infinitives in *ku-* (impersonal or stative) also occur as converbs, though these
19473 forms could in principle also be analyzed as subject participles (§16.1.1). For in-
19474 stance, in (171) *mr-kuu-mbryst* ‘without stop’ is considered to be an impersonal
19475 infinitive serving as a manner converb, but it could be possible to propose an al-
19476 ternative analysis as a *ku-* subject participle ‘the one which does not stop’ used
19477 adverbially. The analysis as infinitives however better accounts for the fact that
19478 only the verbs whose infinitive is in *ku-* have converbial forms in *ku-*.

- 19479 (171) *nua maka mx-kuu-mbrxt zo juu-ryma*
DEM at.all NEG-INF:IMPERS:S/A-ACAUS:break EMPH IPFV-work

19480 *juu-cti tce,*
SENS-be.AFF LNK

19481 ‘It works without stopping at all.’ (26-GZo, 69)

The existential verbs also occur in converbial use. For instance, *tu* ‘exist’ in infinitive form *kui-tu* following a noun or a pronoun can mean ‘in the presence of...’ as in (172).

- 19485 (172) [zara ku-tu] zo to-syruuru tce,
3PL INF:STAT-exist EMPH IFR-compare LNK
19486 'He compared (his testimony with theirs) in their presence.' (150909)
19487 xifangping-zh, 155)

Similarly, the negative existential verb *me* ‘not exist’ in infinitive converbal form means ‘without...’, as in example (173).

- 19490 (173) *tce nxj a-pi* [nxzo kui-me] azo kx-ryzi
LNK 2SG 1SG.POSS-elder.sibling 2SG INF:STAT-not.exist 1SG INF-stay

19491 *my-c^ha-a*
NEG-can:FACT-1SG

19492 ‘Brother, without you I cannot stay (here).’ (2011-05-nyima, 53)

19493 16.2.1.8 Velar infinitives as adverbs

The *kut-* infinitive of stative verbs can be used to create adverbs. The most common example is the degree adverb *kuxtçuxt̪i* ‘a little’ from *xt̪i* ‘be small’ in sentences such as (174). In this example, the co-occurrence of an adverb derived from *xt̪i* ‘be small’ with the verb *wxti* ‘be big’ shows that this adverb is already fully grammaticalized, otherwise such a sentence would be self-contradictory.

- 19499 (174) *βzur syz kui-xtcur~xtci wxti.*
 mouse COMP INF:STAT-EMPH~be.small be.big:FACT
 'It is a little bigger than a mouse.' (21-GzWLa, 4)

19501 An even more lexicalized example is *mrkufts^{hi}* 'forcibly', which occurs in par-
 19502 ticular with causative verbs to express coercive causation (§17.2.5.2), as in (175).

- 19503 (175) *tcendxre mrkufts^{hi} zo, nyki u-me yuu u-mi*
 LNK forcibly EMPH FILLER 3SG.POSS-daughter GEN 3SG.POSS-foot
 19504 *nua ieq^{ha} tuu-xtsa u-ηguu nutcu*
 DEM the.aforementioned INDEF.POSS-shoe 3SG.POSS-in DEM:LOC
 19505 *c^{hγ}-sui-rku*
 IFR:DOWNTSTREAM-CAUS-put.in
 19506 'She forced her daughter to put her foot into that shoe.' (140504
 19507 huiguniang-zh, 228)

19508 This adverb is formally the negative stative infinitive of the verb *fts^{hi}* 'feel bet-
 19509 ter' (of a disease) (§17.2.3).

19510 These adverbs are probably lexicalized from infinitival conversbs (§16.2.1.7), but
 19511 differ from them in lacking any argument structure.

16.2.1.9 Lexicalized velar infinitives

19512 Lexicalized velar infinitives in *kṛ-* found in some compounds, though some cases
 19513 could alternatively be analyzed as lexicalized object participles, and are treated
 19514 in §16.1.2.7.

19515 The delocutive expression *ŋṛtçukṛti,k^hu* 'obey to everything' provides an un-
 19516 ambiguous example of lexicalized velar infinitive. The compound *ŋṛtçukṛti* com-
 19517 bines the pronoun *ŋotçu* 'where' in *status constructus* form *ŋṛtçu-* with the in-
 19518 infinitive *kṛ-ti* of the verb *ti* 'say', and is exclusively used in collocation with *k^hu*
 19519 'be possible, agree', as in (176).⁹ This expression originates presumably from a
 19520 phrase such as 'agree (*k^hu*) to whatever (*ŋotçu*) X says (*kṛ-ti*)'. However, it should
 19521 be noted that the pronoun *tç^{hi}* 'what', not *ŋotçu* 'where' is used in Japhug in the
 19522 free-choice indefinite construction meaning 'whatever' as in examples (98) to
 19523 (100) in §6.6.6. The form *kṛ-ti* in any case was originally the complement of the
 19524 verb *k^hu* 'be possible, agree', which takes infinitival complements (§24.5.3.1), and
 19525 thus is not analyzable as a former object participle.

⁹The causative *ŋṛtçukṛti,suk^hu* 'cause to obey to everything' also exists.

- 19527 (176) *wi-tcwu kwi^bde nura wuma zo ηxtcukyti*
 3SG.POSS-son four DEM:PL really EMPH obey.to.everything(1)
 19528 *pjy-k^buu-nuu*
 IFR.IPFV-obey.to.everything(2)-PL
 19529 ‘His four sons were very obedient.’ (140508 benling gaoqiang de si
 19530 xiongdi-zh, 15)

16.2.2 Bare infinitives

19532 Bare infinitives are formed by combining the stem I of the verb with a possessive
 19533 prefix coreferential with the object of the complement clause, as in example (177).
 19534 Bare infinitives are not attested with orientation, polarity or associated motion
 19535 prefixes. They historically derive from bare action nominal (§16.4.6), which have
 19536 become a very restricted subclass.

- 19537 (177) *nvo kui-fse a-ŋk^bor nui wi-mto*
 you NMLZ:STAT-be.like 1SG.POSS-subject TOP 3SG.POSS-BARE.INF:see
 19538 *mui-pur-rjo-t-a*
 NEG-AOR-experience-PST:TR-1SG
 19539 ‘I never saw anyone like you among my subjects.’ (28-smAnmi, 393)

19540 With *βzyβ* ‘be careful’ as matrix verb however, the possessive prefix can also
 19541 index the transitive subject as in (178) (expressing an indefinite object).

- 19542 (178) *kvtsa ni ndzi-pa jui-βzyβ rca*
 parents.and.children DU 3DU.POSS-BARE.INF:do SENS-be.careful SFP
 19543 ‘The two of them do things very carefully.’ (14-05-10)

19544 Intransitive verbs do not have bare infinitives. Complement-taking verbs se-
 19545 lecting bare infinitives for transitive verbs either take dental *tui-* infinitives (§16.2.3)
 19546 or velar infinitives (§16.2.1) when occurring with intransitive verbs.

16.2.2.1 Complement clauses

19548 Bare infinitives only occur in complement clauses (§24.2.2). Apart from the aspec-
 19549 tual verb *rjo* ‘experience, have already’ mentioned above in (177), bare infinitives
 19550 are found with two categories of complement-taking verbs.

19551 First, they are compatible with some phasal verbs (§24.5.6.2) such as *za* ‘begin’,
 19552 *sraza* ‘begin’, *st^but* ‘finish’ and *jyj* ‘finish’ as in (179).

- 19553 (179) *tce numaa tu-ŋga* *nua u-tʂauβ* *t^hu-jyY*
 LNK DEM INDEF.POSS-clothes DEM 3SG.POSS-BARE.INF:sew AOR-finish
 19554 ‘When one has finished sewing the clothes, ...’ (30-tWNga, 29)

19555 Second, they are found with some adjectives such as *βdi* ‘be well, be good’ and
 19556 derived sigmatic or velar causative verbs such as *yŋ-βdi* ‘repair, cause to be good,
 19557 do *X* well’ as in (180) (see §17.3.2.2, §24.5.1.4).

- 19558 (180) *lu-ji-nua* *q^he u-nypupa* *tu-yŋ-βdi-nua*,
 IPFV-plant-PL LNK 3SG.POSS-BARE.INF:take.care IPFV-CAUS-be.good-PL
 19559 *u-yli* *ra ku-sype-nua* *q^he, c^hu-do* *nua-c^ha*.
 3SG.POSS-dung PL IPFV-do.well-PL LNK IPFV-be.fibrous SENS-can
 19560 ‘(Now people) plant (pumpkin also in higher areas), (if) they take good
 19561 care of it and put enough fertilizers, it can become fibrous (so that it can
 19562 be sowed for the next year).’ (140522 kAmYW tWji, 47)

19563 The same set of verbs take complement clauses with dental infinitives when
 19564 the verb of the complement is intransitive (§16.2.3.2).

19565 The bare infinitives also occur in adnominal complement clauses with the
 19566 noun *u-ts^huya* ‘shape, manner’, as in (181).

- 19567 (181) *ndzi-mi* *u-ts^hoŋ* *u-ts^huya* *nura wuma*
 3DU.POSS-foot 3SG-BARE.INF:attach.to 3SG.POSS-form DEM:PL very
 19568 *zo naŋtcuyŋ-ndzi*.
 EMPH be.the.same:FACT-DU
 19569 ‘The way their feet (of fleas and crickets) touch the ground is very
 19570 similar.’ (26-mYaRmtsaR, 17)

19571 No verb requires a bare infinitive: all complement-taking verbs selecting it are
 19572 either alternatively compatible with velar infinitives (§16.2.1.5) or a finite com-
 19573 plement (§24.2.3).

16.2.2.2 Bare verb stem in negative existential construction

- 19574 A non-finite form resembling bare infinitives without possessive prefix is found
 19575 in an unusual construction with the negative existential verbs *me* ‘not exist’ and
 19576 *maje* ‘not exist’ (§13.1.2) with alternative concessive meaning ‘whether or not *X*,
 19577 it amounts to the same’ (§25.2.3.2), in which the bare verb stem occurs in affir-
 19578 mative and in negative form with the negative prefix *my-*. Unlike bare infinitives
 19579 proper, this form exists with both transitive (182) and intransitive verbs (183).

- 19581 (182) *ndza* *my-ndza* *me-a*
 BARE.INF:eat NEG-BARE.INF:eat not.exist:FACT-1SG
 19582 ‘Whether (you) eat me or not, it amounts to the same.’ (sentence
 19583 obtained as the correction of a sentence I produced to translate a story
 19584 in Japhug)
- 19585 (183) *tce* *wi-qiuw* *pwi-mts^ham-a*, *wi-qiuw* *múj-mts^ham-a* *q^he*,
 LNK 3SG.POSS-half SENS-hear-1SG 3SG.POSS-half NEG:SENS-hear-1SG LNK
 19586 *ce* *my-ce* *maje*
 BARE.INF:go NEG-BARE.INF:go not.exist:SENS
 19587 ‘I can hear half of it, can’t hear the other half, whether or not (I) go it
 19588 amounts to the same.’ (conversation 140510)

19589 In this construction, the negative auxiliaries can take person marking, and are
 19590 obligatorily coreferential with the object if the verb in the complement clause is
 19591 transitive, as in (182). With intransitive verbs, no person marking appears on the
 19592 negative verb as in (183).¹⁰ In this construction, the transitive subject (whether
 19593 of transitive or intransitive verbs) cannot be overt.

19594 Although the non-finite form *ce* in (183) superficially resembles a 3SG Factual
 19595 Non-Past (§21.3.1), the absence of stem III alternation (§12.2.2) on *ndza* in (182)
 19596 shows that this cannot be a finite form (otherwise *ndze* ‘s/he/it will eat/eats it’
 19597 would be expected).

16.2.3 Dental infinitives

19599 Dental infinitives (glossed as ‘second infinitives’ INF:II) are built by prefixing *tu-*
 19600 with the verb stem. Dental infinitives occur with intransitive verbs, including
 19601 dynamic (184) and stative verbs (185), including semi-transitive verbs, but are
 19602 not attested with transitive verbs, which take bare infinitives or velar infinitives
 19603 instead.

- 19604 (184) *tu-ŋke* *ta-za* *tce*
 INF:II-walk AOR:3→3'-start LNK
 19605 ‘When it starts moving...’ (26-NalitCaRmbWm, 79)

19606 With contracting verbs (§12.3), regular vowel fusion between the *tu-* prefix
 19607 and stem-initial *a-* occurs, resulting in the surface form /tʂ-/ as in (185).

¹⁰The fact that only the object is indexed on the auxiliary verb suggests here that this construction displays nominative-accusative alignment.

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- 19608 (185) *si nur dalsutsa nur tuu-yrgi no-za tce*
tree DEM slowly DEM INF:II-be.green IFR-start LNK
19609 ‘The tree slowly started to become green.’ (divination 2003, 110)
- 19610 However, a few morphologically transitive verbs with dummy subjects (§14.3.5),
19611 in particular *lxt* ‘throw’ and *βzu* ‘make, do’ do take *tuu-* infinitives as in (186). Note
19612 that in these complex predicates, the light verbs *lxt* ‘throw’ and *βzu* ‘make, do’,
19613 although transitively conjugated, cannot take an overt subject marked with the
19614 ergative, and only have one argument.
- 19615 (186) *tuu-muu kui-wxtur~wxti zo tuu-lxt pjy-za*
INDEF.POSS-sky SBJ:PCP-EMPH~be.big EMPH INF-throw IFR-start
19616 ‘A big rain started.’ (150819 haidenver-zh, 104)
- 19617 It is possible that dental infinitives are historically related to degree nominals
19618 (§16.3) and action nominals (§16.4), which however do not display the same transi-
19619 tivity restrictions. Several hypotheses accounting for the origin of dental infini-
19620 tives are presented in §16.8.3.
- 19621 **16.2.3.1 Polarity prefixes**
- 19622 Dental infinitives are only compatible with polarity prefixes (as in example 187),
19623 and cannot take orientation or associated motion. Possessive prefixes on dental
19624 infinitives only occur in the simultaneous construction with the verb *supa* ‘cause
19625 to do’ (§24.5.1.3).
- 19626 (187) *qaʃy u-me numu, tcendyre kʰro my-tuu-rga to-za*
fish 3SG.POSS-daughter DEM LNK a.lot NEG-INF:II-like IFR-start
19627 ‘He started not liking the mermaid that much (anymore).’ (150819
19628 haidenver-zh, 154)
- 19629 Degree nominals present the same constraints on orientation and associated
19630 motion prefixes (§16.3.1).
- 19631 **16.2.3.2 Complement clauses**
- 19632 Dental *tuu-* infinitives are only attested in complement clauses (§24.2.2), and are
19633 only found with the verbs that select a bare infinitive (§16.2.2.1) when the verb in
19634 the complement clause is transitive. This complementary distribution suggests
19635 that bare infinitive and dental infinitives could be treated as two variants of the
19636 same grammatical category.

¹⁹⁶³⁷ Dental infinitives are more often attested with phasal verbs, in particular *za*
¹⁹⁶³⁸ ‘start’ and *srza* ‘start’ as in (188).

- ¹⁹⁶³⁹ (188) *mts^hu nuu c^humc^hum zo, tce, tuu-skym pjr-srza*
 lake DEM IDPH(II):slowly.retreating EMPH LNK INF:II-be.dry IFR-start
¹⁹⁶⁴⁰ ‘The (water of the) lake started to retreat slowly.’ (nyima wodzer 2003,
¹⁹⁶⁴¹ 105)

¹⁹⁶⁴² Non-phasal verbs selecting bare infinitive such as *rno* ‘experience’ never occur
¹⁹⁶⁴³ with the dental infinitive in the corpus, but such forms can be elicited, as in (189).
¹⁹⁶⁴⁴ In the corpus, intransitive complements of the verb *rno* ‘experience’ rather velar
¹⁹⁶⁴⁵ infinitives; it is also possible in (189) to replace the dental infinitive *tuu-yi* with a
¹⁹⁶⁴⁶ velar infinitive *kṛ-yi*.

- ¹⁹⁶⁴⁷ (189) *mbark^hom tuu-yi puu-rno-t-a*
 TOPO INF:II-come AOR-experience-PST:TR-1SG
¹⁹⁶⁴⁸ ‘I came to Mbarkham before.’ (elicited)

¹⁹⁶⁴⁹ Like other intransitive verbs, antipassivized transitive verbs can take a dental
¹⁹⁶⁵⁰ infinitive (as in 190), unlike the base verb from which they are derived (as in 191,
¹⁹⁶⁵¹ where a bare infinitive is used instead).

- ¹⁹⁶⁵² (190) *tuu-ry-ryt pa-za*
 INF:II-APASS-write AOR:3→3'-start
¹⁹⁶⁵³ ‘He started writing.’ (elicited)

- ¹⁹⁶⁵⁴ (191) *trscoz uu-ryt pa-za*
 letter 3SG.POSS-BARE.INF:write AOR:3→3'-start
¹⁹⁶⁵⁵ ‘He started writing the/a letter.’ (elicited)

¹⁹⁶⁵⁶ In addition, dental infinitives also occur in complements of causativized verbs
¹⁹⁶⁵⁷ (§24.5.1.3, §24.5.1.4), and in the construction expressing simultaneous actions
¹⁹⁶⁵⁸ with *supa* ‘cause to do’ described in §16.2.2.1.

16.3 Degree nominals

¹⁹⁶⁶⁰ Degree nominals are built by combining the verb stem with a nominalizing *tu-*
¹⁹⁶⁶¹ prefix and a possessive prefix coreferent with the subject, as the dual *ndzi-* in (192).
¹⁹⁶⁶² The form *ndzi-tuu-ṛmumi* also shows that the nominalization *tu-* prefix undergoes
¹⁹⁶⁶³ regular vowel fusion with stem-initial *a-* to /ṛv/.

- 19664 (192) *tcendyre ndzi-tuu-ymumi*
 LNK 3DU.POSS-NMLZ:DEG-be.in.good.terms
 19665 *ndzi-tuu-scit* *pui-saxas* *zo* *pui-yu*
 3DU.POSS-NMLZ:DEG-be.happy PST.IPFV-be.extremely EMPH SENS-be
 19666 ‘They were very happy together.’ (2005 Lobzang, 13)
- 19667 All gradable stative verbs can form degree nominals. They most typically occur in constructions expressing degree as in (192) (§16.3.4, §26.1.2), but can also indicate manner as in (193).
 19668
 19669
- 19670 (193) *nui-mi uu-tuu-yjru kuny muij-naytcuuy.*
 3PL.POSS-leg 3SG.POSS-NMLZ:DEG-be.curved also NEG:SENS-be.the.same
 19671 ‘(People with clubfoot) also differ in the way that their feet are curved
 19672 (some have both legs curved, some only one, some have the legs rotated
 19673 inwards, others rotated outwards, 160719 kAmARu-8)
- 19674 With dynamic verbs, degree nominals express either the intensity or the fre-
 19675 quency of an action as in (194), or the manner of the action (195). Such examples
 19676 are however uncommon in the corpus.
- 19677 (194) *japa tce p^ha^rrgot uu-tuu-nyru pui-saxas*
 last.year LOC boar 3SG.POSS-NMLZ:DEG-eat.crops SENS-be.extremely
 19678 *zo tce*
 EMPH LNK
 19679 ‘Last year, a boar was causing a lot of damages to the crops.’ (150829
 19680 phaRrgot, 1)
- 19681 (195) *tua-tuu-ymdzii kuu-βdi m^y-kuu-βdi kuny*
 GENR:POSS-NMLZ:DEG-sit INF:STAT-be.well NEG-INF:STAT-be.well also
 19682 *zo c^huu-syfeyra-nui pui-cti.*
 EMPH IPFV-discuss-PL PST.IPFV-be.AFF:FACT
 19683 ‘People would discuss whether one sat well or not.’ (31-khAjmu, 28)
- 19684 Degree nominals from transitive verbs are extremely rare, but do occur in par-
 19685 ticular for tropative verbs (§17.5) as in (196). It is possible to elicitate degree nom-
 19686 inals for most transitive verbs, even if such forms are not attested in the corpus.
- 19687 (196) *maka uu-tuu-ny-mpcyrr kuu p^y-nyscyr*
 completely 3SG.POSS-NMLZ:DEG-TROP-be.beautiful ERG IFR-be.startled
 19688 *zo.*
 EMPH
 19689 ‘He found her so beautiful that he was startled.’ (140429 jiedi-zh, 181)

Although similar in form to dental infinitives (§16.2.3) and action nominals (§16.4), they differ from both categories in requiring the presence of a possessive prefix (see §16.8.3 concerning the historical relationship between these forms). In addition, unlike dental infinitives, degree nominals are compatible with both intransitive and transitive verbs. Their semantics is also fully predictable, unlike action nominals which tend to be lexicalized (§16.4.5).

Degree nominal occur in exclamative nominal predicates (§16.3.3), degree constructions (§16.3.4) and also several types of complement clauses (§16.3.5).

Another type of degree nominal is built by compounding the stems of two antonyms, for instance *jasmba* ‘thickness’ (of a sheet) from *jas* ‘be thick’ and *mba* ‘be thin’ (§5.5.2.2). The corresponding regular degree nouns also exist (*u-tuu-jas* and *u-tuu-mba*).

16.3.1 Polarity prefixes

Like dental infinitives (§16.2.3.1), degree nominals cannot be used with orientation or associated motion prefixes, but can be found with the negative prefix *mr-*, as in (197).

- (197) *maka u-my-tuu-nuuyuu-ηke* *pjx-saxax* *zo*
 at.all 3SG.POSS-NEG-NMLZ:DEG-FACIL-walk IFR.IPFV-be.extremely EMPH
 'It was extremely inconvenient to walk (on the soft earth).' (014-kWLAG,
 148)

16.3.2 Argument structure

Unlike action nominals, degree nominals still keep their argument structure intact. They can take complements exactly in the same way as finite verb forms. For instance, *βdi* ‘be well, be good’ takes the bare infinitive *w-tas* in (198).¹¹

- (198) *maka nuu raz rcanuu, u-tuu-pe*
at.all DEM cloth UNEXP:DEG 3SG.POSS-NMLZ:DEG-be.good
nuu-saxab zo, u-taa
SENS-be.extremely EMPH 3SG.POSS-BARE.INF:weave
u-tuu-betai, u-tuu-mpcyr
3SG.POSS-NMLZ:DEG-be.well 3SG.POSS-NMLZ:DEG-be.beautiful

¹¹Note that the bare infinitive *w-tar* from the verb *tar* ‘weave’ is homophonous with the relator noun *w-tar* ‘on, above’ (§8.3.4.3) and that this construction is potentially ambiguous.

- 19716 *nur-saxas*
 SENS-be.extremely
- 19717 ‘This piece of cloth is very nice, it is extremely well woven, it is
 extremely beautiful.’ (140521 huangdi de xinzhuang-zh, 84-85)
- 19719 In (199), the verb *mbat* ‘be easy’ selects a finite complement clause comprising
 19720 the verb *c^huu-wxti* ‘it grows bigger’ in imperfective third singular form.
- 19721 (199) *c^hui-wxti uu-tuu-mbat* *nur-syre* *zo*
 IPFV-be.big 3SG.POSS-NMLZ:DEG-be.easy SENS-be.ridiculous EMPH
 19722 ‘It grows big very easily.’ (25-akWzgumba, 77)
- 19723 Degree nominals can also be used with oblique arguments, such as the first
 19724 person marked by the relator noun *a-ta_s* (unrelated to the bare infinitive *uu-ta_s*
 19725 from the previous example) in (200).
- 19726 (200) *a-wi* *a-ta_s* *uu-tuu-yyutšun*
 1SG.POSS-grandmother 1SG-on 3SG.POSS-NMLZ:DEG-be.kind
 19727 *uu-gryl* *me*
 3SG.POSS-order not.exist:FACT
 19728 ‘My grandmother was extremely kind to me (so that I have to repay
 19729 her).’ (2005 Kunbzang, 407)
- 19730 **16.3.3 Nominal predicates**
- 19731 Degree nominals commonly occur as nominal predicates (§22.3), either with the
 19732 sentence final particle *nur* as in (201), or as a bare noun phrase as in (202). In
 19733 this predicative use, degree nominals express an exclamation, possibly including
 19734 surprise as in (97) and (202).
- 19735 (201) *ly-yi-nur* *wo ty-rundzytshi-nur* *ma,*
 IMP:UPSTREAM-come-PL SFP IMP-have.a.meal-PL C
 19736 *nur-tuu-mtsur-cpas* *nur,*
 2PL.POSS-NMLZ:DEG-be.hungry-be.thirsty SFP
 19737 *nur-tuu-pat* *nur*
 2PL.POSS-NMLZ:DEG-be.tired SFP
 19738 ‘Come in and have a meal, you (must be) so hungry, thirsty and tired!’
 19739 (160701 poucet2, 40)

19740 Example (198) can be compared with (202) with the verb of degree *saxaꝝ* ‘be
 19741 extremely’ in sensory form. It is possible that the use of degree nominal as nom-
 19742 inal predicates historically results from the ellipsis of the degree predicate. The
 19743 high frequency of the predicative use of degree nominals in the corpus however
 19744 indicates that this usage has been constructionalized.

- 19745 (202) *w-taꝝ* *w-tu-βdi*,
 19746 3SG.POSS-BARE.INF:weave 3SG.POSS-NMLZ:DEG-be.well
w-tu-mpcyr!
 19747 3SG.POSS-NMLZ:DEG-be.beautiful
 19748 ‘It is woven so well, it is so beautiful!’ (140521 huangdi de xinzhuang-zh,
 181)

19749 16.3.4 Degree construction

19750 The most common use of the degree nominals is in the degree construction,
 19751 where they occur as intransitive subjects of degree verbs like *saxaꝝ* ‘be extremely’,
 19752 which are always in 3SG form as in (203). The possessive prefix on the degree
 19753 noun is coreferent with the referent having the property described by the nom-
 19754 inalized verb, often 3SG as in (203), but not exclusively, for instance with a 3DU
 19755 in (192) above.

- 19756 (203) *nunuu si nua w-tu-jpum pjax-saxaꝝ*
 19757 DEM tree DEM 3SG.POSS-NMLZ:DEG-be.thick IFR.IPFV-be.extremely
zo tce,
 19758 EMPH LNK
 ‘That tree was extremely thick.’ (150902 luban-zh, 101)

19759 This construction is described in more details in (§26.1.2).

19760 16.3.5 Complementation

19761 Degree nominals are marginally attested in a complementation strategy, as sub-
 19762 ject clauses of the modal verb *ra* ‘need, have to’ in negative form, meaning ‘X
 19763 should not be so Y’, where X is the subject indexed by the possessive prefix pre-
 19764 ceding the *-tu-* nominalization prefix, and Y the verb in degree nominal form. For
 19765 instance, the common expression in (204) with the degree nominal *nr-tu-syre*
 19766 literally means ‘You should not be so ridiculous’.

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- 19767 (204) *ny-tu-syre* *nua my-ra*
 3SG.POSS-NMLZ:DEG-be.ridiculous DEM NEG-be.needed
 'What you (did/said) is outrageous.' (several examples)

19768 This construction also occurs with the antipassive verb *syrnk^he* 'bully people',
 19770 as in (205).¹²

19771 (205) *ny-tu-sy-nyk^he* *nua my-ra*
 3SG.POSS-NMLZ:DEG-APASS:HUM-bully DEM NEG-be.needed
 'You cannot treat people so badly.' (2005fWJo, 47)

19773 The degree nominals also seem to occur as adnominal complement of *u-ts^huya*
 19774 'shape, method' as in (206). Note however that since bare infinitives are attested
 19775 in complement clauses of this noun (see example 181, §16.2.2.1), it is also conceiv-
 19776 able that the forms *u-tu-ts^hu* and *u-tu-rsom* could be alternatively analyzed as
 19777 dental infinitives (§16.2.3).

19778 (206) *pas nua u-βri*, *nyki*, *u-rme* *kua-me* *zo*
 pig DEM 3SG.POSS-body FILLER 3SG.POSS-hair INF:STAT-not.exist EMPH
 u-ts^huya *nua-fse* *ma u-tu-ts^hu* *c^hondyre*
 3SG.POSS-shape SENS-be.like LNK 3SG.POSS-NMLZ:DEG-be.fat COMIT
 u-tu-rsom *u-ts^huya* *nua zo* *nua-fse*
 3SG.POSS-NMLZ:DEG-be.rough 3SG.POSS-shape DEM EMPH SENS-be.like
 '(The body of the elephant) resembles that of the pig in that it has no
 hair, in that it is fat and (its skin) is rough.' (19-RloNbutChi, 46-47)

16.4 Action nominals and abstract nouns

16.4.1 *tu-* action nominals

19785 There are two types of action nominals in Japhug: action nominals in *tu-*, a very
19786 productive formation which is the main topic of this section, and the bare action
19787 nominals, treated in §16.4.6.

19788 Action nominals in *tu-* can be built from both intransitive and transitive verbs.
19789 They differ from both participles and infinitives in that the argument structure
19790 of the verb is lost and the transitivity contrast neutralized, and cannot take ob-
19791 jects or oblique arguments other than possessors like normal alienably possessed
19792 nouns.

¹²The meaning of this sentence is close to Chinese 你太欺负人了 <nǐ tài qīfù rén le> ‘you are out of line’.

19793 The action nominal has three potential meanings. First, it can refer to the ac-
 19794 tion itself, for instance *tuji* ‘planting and sowing’¹³ from the verb *ji* ‘plant’, *tuyjaþ*
 19795 ‘action of churning’ from *yjaþ* ‘churn’, *turjaþ* ‘dance (n)’ from *rjaþ* ‘dance’ (intrans-
 19796 sive verb), *tusi* ‘death’ from *si* ‘die’ or *tumu* ‘fear’ from *mu* ‘fear’. In this function,
 19797 it can be used in a collocation with *βzu* ‘make’ (§24.4.3.1).

19798 Second, it can mean an object affected by, or resulting from the action. This is
 19799 also the case with some intransitive verbs, for instance *tuqios* from the intransitive
 19800 *qios* ‘vomit’ which can either mean ‘the action of vomiting’ or ‘vomitus’ or
 19801 *tuçkʰo* from *çkʰo* ‘dry in the sun’ which can either be ‘action of drying in the sun’
 19802 or ‘grain that are dried in the sun’ (see 86 in §24.4.3.1).

19803 Third, it can also refer to the way an action is performed, for instance *tu-*
 19804 *ryst* which means ‘style of writing, way of writing’ as in (207). This function is
 19805 probably the direct historical origin of the degree nominals (§16.3).

- 19806 (207) *tce <er> w-tuu-ryt tsa juu-fse ri, nuw*
 LNK two 3SG.POSS-NMLZ:ACTION-write a.little SENS-be.like LNK DEM
 19807 *stʰuci muu-juu-ŋgyy*
 so.much NEG-SENS-ACAU:warf
 19808 ‘(The constellation) looks a little bit like the way ‘two’ is written, but not
 19809 as curved.’ (29-LAntshAm, 55)

19810 Stative verbs can also have *tu-* nominals, expressing abstract nouns, for in-
 19811 stance *tutṣaq* ‘justice’ from *ṣaq* ‘be fair’.

19812 When the base verb has a stem in *a-*, the action nominal prefix *tu-* under-
 19813 goes regular vowel fusion to *tr-* as in *tryro* ‘game’ from the intransitive verb *ayro*
 19814 ‘play’ (however, this verb is also potentially analyzable as a *a-* denominal verb,
 19815 see §20.2.1 and §16.4.6 below).

19816 The direction of derivation between noun and verb is not always trivial to
 19817 determine. For instance, the noun *tutsye* ‘commerce’ could seem to be the action
 19818 nominal of the transitive verb *ntsye* ‘sell’. However, in this case it is better to
 19819 analyze the noun as the base form, and the verb as denominal (the *n-* element
 19820 being an irregular allomorph of the *nu-* denominal prefix, §20.10.1.1).

19821 Action nominals can occur as prenominal modifiers, as in *tutax* *mtʰuxtcyr*
 19822 ‘weaving belt’ (the belt used to attach the back-tension loom), comprising the ac-
 19823 tion nominal *tutax* ‘weaving’ (from *tax* ‘weave’) and the compound noun *mtʰux-*
 19824 *tcyr* ‘belt’.

¹³This action noun should not be confused with the related inalienably possessed noun *tu-ji* ‘field’, which is a different nominalized form.

19825 16.4.2 *ty-* abstract nouns

19826 Abstract nouns in *ty-* can be exclusively derived from adjectival stative verbs.
 19827 The derivation is generally regular but there are exceptions like *tyŋnat* ‘tiredness’
 19828 from *nat* ‘be tired’ with an additional -y- or *tyŋym* ‘pain’ from *mjym* ‘hurt’ with
 19829 a missing -m-.¹⁴

19830 Abstract nouns mainly occur with the ergative *kui*. These postpositional phrases
 19831 express either the manner in which an action takes place (§8.2.2.5) as in (208), or
 19832 the cause of the action describe by the main verb due to a high degree as in (209)
 19833 (see also §26.1.2.1).

- 19834 (208) *ty-rga* *kui zo tʰuu-ari* *jui-ŋu.*
 NMLZ:ABSTRACT-be.happy ERG EMPH AOR:DOWNSTREAM-go[II] SENS-be
 19835 ‘She went there happily.’ (2005 Kunbzang, 258)

19836 Example (209) also illustrates that one ergative postposition can follow several
 19837 abstract nouns linked with the comitative *cʰo* or in bare coordination (§9.2.2).

- 19838 (209) *a-bi, ty-ŋnat cʰo*
 1sg.poss-younger.sibling NMLZ:ABSTRACT-be.tired COMIT
 19839 *ty-mtsur ty-cpas kui*
 NMLZ:ABSTRACT-be.hungry NMLZ:ABSTRACT-be.thirsty ERG
 19840 *múj-sy-cʰa tce, num-a-j je*
 NEG:SENS-PROP-can LNK rest:FACT-1PL HORT
 19841 ‘Brother, we are so tired, hungry and thirsty that we can (go any
 19842 further), let us rest!’ (qachGa2012, 141)

19843 The meaning of the abstract nouns in (209) is very similar to that of degree
 19844 nominals (§16.3.4) combined with the ergative in examples such as (210).

- 19845 (210) *maka u-tuu-mtsur kui ky-ŋke mui-ŋy-cʰa*
 at.all 3SG.POSS-NMLZ:DEG-hungry ERG INF-go NEG-IFR-can
 19846 ‘It was so hungry that it could not walk anymore.’ (140515 huli he
 19847 yelv-zh, 41)

¹⁴In the case of *tyŋym* ‘pain’ it is possible that the verb *mjym* ‘hurt’ derives from the noun with the irregular allomorph of a denominal prefix, which could be either *y-* (§20.5) or *mr-* (§20.6). Note also the existence of the compound noun *tuxtyŋym* ‘dysentery’ from the *status constructus* of *tuu-xtu* ‘belly’ with the root *-ŋym*.

19848 Abstract nouns in *tr-* are also attested without ergative to express the state or
 19849 condition described by the adjective, for instance *tr-mtsur* ‘hunger’ from *mtsur*
 19850 ‘be hungry’, as in (211) and (212). Note in both example the possibility of adding
 19851 a possessive prefix on the noun.

- 19852 (211) *a-tr-mtsur* *nura ci a-nui-sury-zí*
 1SG.POSS-NMLZ:ABSTRACT-be.hungry DEM:PL a.little IRR-PFV-CAUS-ease
 19853 *nui-ra*
 SENS-be.needed
 19854 ‘Let’s (catch the mouse) to ease my hunger.’ (140518 mao he laoshu-zh,
 19855 19)
- 19856 (212) *nunuu соксөв ти-тас* *pui-ky-ryt* *qajyi nui kuu*
 DEM paper 3SG.POSS-on AOR-OBJ:PCP-write bread DEM ERG
 19857 *tui-tr-mtsur* *nui-yx-p^hyn*
 GENR.POSS-NMLZ:ABSTRACT-be.hungry IPFV-CAUS-be.efficient
 19858 *my-c^ha*
 NEG-can:FACT
 19859 ‘Bread drawn on a piece of paper cannot ease one’s hunger.’ (160718
 19860 huabingchongji-zh, 35)

19861 In addition, we find abstract alienably possessed nouns in *tr-* expressing an
 19862 abstract state, but which are not synchronically derived from a verb, and whose
 19863 corresponding verbs are denominal. Table 16.5 presents some examples.

Table 16.5: Abstract nouns not derived from verbs

Abstract noun	Denominal Verb	
<i>trndzo</i> ‘cold’	<i>yrrndzo</i> ‘be cold’	vs.
<i>trscyr</i> ‘being startled’	<i>nyrscyr</i> ‘be startled’	vi.
<i>trzras</i> ‘shame’	<i>nyrzras</i> ‘feel shame, be embarrassed’	vi.
<i>trmqe</i> ‘scolding’	<i>nyrmqe</i> ‘scold’	vt.
<i>trndut</i> ‘quarrel, dispute (n)’	<i>nyrndut</i> ‘dispute’	vt.

19864 The relator noun *w-trju* ‘addition’, which is essentially attested as an incre-
 19865 mental addition linker (‘in addition to X’, §25.6.2.3) is a trace of the abstract
 19866 noun from which the denominal verb *yxyju* ‘add’ was built (§20.5.2).

19867 These nouns possibly derive from base verbs which disappeared and were re-
 19868 placed by the corresponding denominal verbs.

19869 The noun *trk^he* ‘idiot, fool’ deriving from *k^he* ‘be stupid’ formally resembles
 19870 an abstract noun, but semantically differs from the other nouns in this category;
 19871 it is possibly an alienabilized form of the property noun *w-k^he* ‘nasty’ (§5.1.2.7,
 19872 §16.4.6).

19873 16.4.3 Simultaneous

19874 The simultaneous action nominal is built by prefixing an additional *tu-* to the
 19875 base form of the action nominal, resulting in a double *tu-tu-* prefixed form. It is
 19876 found in collocation with the verb *βzu* ‘make’ (§22.4.2), and optionally with the
 19877 comitative *c^ho* (§8.2.5), linking two noun phrases referring to the entities under-
 19878 going the action together as in (213).

- 19879 (213) *tr-wa nuu kuu w-tcui c^ho w-me ni*
 19880 INDEF.POSS-father DEM ERG 3SG.POSS-son COMIT 3SG.POSS-daughter du
vnabna zo tuu-tuu-rqos ko-βzu.
 19881 both EMPH SIMULT-NMLZ:ACTION-hug IFR-make
 19882 ‘The father hugged both his son and his daughter at the same time.’
 (140427 xiong he mei-zh, 22)

19883 In this construction, the orientation preverb on *βzu* ‘make’ is the one that is
 19884 lexically selected by the verb in simultaneous action nominal form (EASTWARDS
 19885 in 213, reflecting the centripetal function of this orientation, §15.1.4.3). With ori-
 19886 entable verbs (§15.1.2), the unspecified orientation *ja-* can be selected (214).

- 19887 (214) *zyni tuu-tuu-ce ja-βzu-ndzi*
 19888 3DU SIMULT-NMLZ:ACTION-go AOR:3→3'-make-DU
 ‘They went at the same time.’ (elicited)

19889 Example (214) also illustrates the fact that, when the verb in simultaneous
 19890 action nominal form is intransitive, the shared subject (here *zyni*) is in absolute
 19891 form, even though *βzu* is transitive. This type of construction is described in more
 19892 detail in §24.4.3.2.

19893 The first *tu-* prefix in the simultaneous construction is probably from the nu-
 19894 meral *tu-* ‘one’ prefix (§7.3.1.1), added to a *tu-* action nominal. With intransitive
 19895 verbs, the dental infinitives in *tu-* (with a possessive prefix coreferent with the
 19896 subject) also occur to express simultaneous actions in collocation with the light
 19897 verb *supa* ‘cause to do’, as shown by (118) in §16.2.2.1. The action nominal simulta-
 19898 neous construction differs however from the dental/bare infinitive simultaneous
 19899 construction in that in the former the action of the same verb applies to different

19900 subject/objects, while in the latter the same subject performs actions expressed
 19901 by different verbs.

19902 16.4.4 Denominalization of action nominals

19903 Some *tuu-* action nominals can serve as base for denominal derivation in *nuu-* or
 19904 *ruu-* (§20.4.3), resulting in a verb with a double derivation *nuu-tuu-* or *ruu-tuu-*. This
 19905 category is highly heterogeneous, and unlike voice derivations originating from
 19906 denominal prefixes, has not developed a consistent meaning and grammatical
 19907 function.

19908 In some cases, the meaning of the (doubly) derived verb is predictable from
 19909 the base verb, but the two verbs differ in their argument structure. For instance,
 19910 in *fçrl* 'have diarrhea' → *tufçrl* 'diarrhea' → *nutufçrl* 'have diarrhea'. In this par-
 19911 ticular case, the base verb (from Tibetan *bçal* 'diarrhea') and the doubly derived
 19912 verb *nutufçrl* 'have diarrhea' are both intransitive verbs, but differ in that the
 19913 former select a body part as subject (the person being indicated by a possessive
 19914 prefix), while the latter selects the person suffering the disease.

- 19915 (215) *a-xtu nuu-fçyl*
 1SG.POSS-belly SENS-have.diarrhea
- 19916 (216) *nuu-nutufçal-a*
 SENS-have.diarrhea-1SG
 'I have diarrhea.' (elicited)

19918 Note that a collocation with *βzu* 'make' is also attested with the action nominal
 19919 *tufçrl* 'diarrhea' (as in §24.4.3.1), but the experiencer is encoded as a possessive
 19920 prefix on that noun, as *nuu-tuu-fçrl* in (217). Given the parallelism between deno-
 19921 minal derivations and noun-light verb collocations (§22.4.2.1), it is possible that the
 19922 denominal verb *nutufçrl* 'have diarrhea' came into existence as the verbalized
 19923 form of this collocation.

- 19924 (217) *nvrji nuara, nuu-tuu-fçrl ci*
 infant DEM:PL 3PL.POSS-NMLZ:ACTION-have.diarrhea INDEF
- 19925 *nuu-βze ngryl tce*
 SENS-make[III] be.usually.the.case:FACT LNK
 'Infants, they often suffer from diarrhea.' (17-xCAj, 112)

19927 In other cases, the doubly derived verb may have a much more restricted mean-
 19928 ing than the base verb, especially when the action nominal on which it is based
 19929 is more lexicalized (§16.4.5).

19930 For instance, the noun *tusqa* ‘wheat gruel’ derived from the transitive verb *sqa*
 19931 ‘cook’ is denominalized as the intransitive *rutusqa* ‘have wheat gruel’ (§20.4.1),
 19932 whose semantic relationship with the base verb is more remote.

19933 This category is difficult to distinguish from denominal verbs from bare action
 19934 nominals (§16.4.6) taking an indefinite possessor prefix *tu-*. For instance, the trans-
 19935 itive verb *tcʰuu* ‘gore, stab, pierce’ can be used in a light verb construction in *lyt*
 19936 ‘throw, release’ in bare infinitive form, as in (218).

- 19937 (218) *u-tcʰuu* *to-lyt*
 19938 3SG.POSS-BARE.INF:gore IFR-throw
 ‘He stabbed him.’ (elicited)

19939 The denominal verb *nututcʰuu* ‘stab’ (attested in 219) is most probably derived
 19940 from the indefinite form *tu-tcʰuu* of the bare infinitive in the construction in (218),
 19941 though it is also conceivable that this form comes from the action nominal.

- 19942 (219) *to-nututcʰuu tce pjr-sat*
 19943 IFR-stab LNK IFR-kill
 ‘She stabbed him and killed him.’ (140512 alibaba, 300)

16.4.5 Lexicalized action nominals

19945 Action nominals in *tu-* are prone to lexicalization, developing meanings that are
 19946 unpredictable from the base verb.

19947 Action nominals from verbs related to preparation or ingestion of food can
 19948 become names of specific types of food. For instance, *tusqa* ‘wheat gruel’ and
 19949 *tuutsʰi* ‘rice gruel’ originate from the transitive verbs *sqa* ‘cook’ and *tsʰi* ‘drink’,
 19950 though the synchronic link between these nouns and the base verbs has ceased
 19951 to be completely obvious. Other cases of unpredictable meanings are found with
 19952 *tupu* ‘moxibustion’ (with the verb *ta* ‘put’ §22.4.2.6, as in 220), which derives
 19953 from *pu* ‘cook’ (especially of potatoes in hot ashes, but is not used in reference
 19954 to moxibustion).

- 19955 (220) *tupu ku-ta-nuu tce, tx-pvtsø yuu u-laz*
 19956 moxibustion IPFV-put-PL LNK INDEF.POSS-child GEN 3SG.POSS-forehead
 19957 *ci ku-ta-nuu,*
 19958 one IPFV-put-PL
 ‘(To treat this disease), they apply moxibustion, they apply one on the
 forehead of the child.’ (25-kACAl, 71)

19959 In some cases, the action noun has a highly restricted meaning in compar-
 19960 ision with the base verb, limited to one particular sub-meaning. For instance,
 19961 the noun *tupyaš* ‘land clearing’ (221) (used in collocation with *tcxt* ‘take out’,
 19962 §22.4.2.3) derives from the transitive verb *pyaš* ‘turn over’, which has the mean-
 19963 ing ‘plough’ when occurring with the orientation preverb UPSTREAM (see exam-
 19964 ple 135 in §18.6.3). This noun lacks the basic meaning of the base verb and its
 19965 additional extended meanings (such as ‘go across (a mountain)’, like Chinese 翻
 19966 山 <fanshān> ‘cross a mountain’). The antipassive *r̥ypyas* ‘clear fields’ has the
 19967 same meaning restriction as the action noun, an observation whose significance
 19968 is developed in §20.10.1.2.

- 19969 (221) *tupyaš lo-tcxt-ndzi*
 field.clearing IFR:UPSTREAM-take.out-DU
 19970 ‘They cleared fields.’ (07-deluge, 113)

19971 The divergence in meaning between the action nominal and the base verb can
 19972 also be due to semantic innovation in the verb. For instance, the verb *rma* means
 19973 in Japhug ‘to stay at someone else’s place (for a few nights), as in (222), but the
 19974 action nominal *turma* ‘household’ (223), suggesting that the original meaning
 19975 of the verb used to be ‘live’ and became more restricted semantically, while the
 19976 derived noun preserved its original meaning.

- 19977 (222) *syndzum <laoshi> ui-cki ri ky-ari-a tce, tuu-rzaš*
 ANTHR teacher 3SG.POSS-DAT LOC AOR-go[II]-1SG LNK ONE-night
 19978 *c-pui-nuu-rma-a*
 TRAL-AOR-AUTO-stay.at-1SG
 19979 ‘I went to Sandzin’s (house), and stayed there for one night.’
 19980 (conversation 160811)

- 19981 (223) *kʰa ra cʰy-fkaβ-ndzi qʰe turma ko-ndo-ndzi*
 house PL IFR-COVER-DU LNK household IFR-take-DU
 19982 ‘They built a house and established a family.’ (02-deluge 2012, 131)

19983 Note the barely translatable use of the action nominals *turma* and *tuβluu* (the
 19984 latter from the transitive verb *βluu* ‘burn’) in the expression used as the conclusion
 19985 of most traditional stories in (224).

- 19986 (224) *turma tur-βlur cʰγ-nur-sγŋcγŋcγt-nur*
 household NMLZ:ACTION-burn IFR-AUTO-cause.to.be.prosperous-PL
 19987 *kx-ti nur-ŋu*
 INF-say SENS-be
 19988 ‘They lead a prosperous life = they live happily ever after’ (many
 19989 examples)

19990 There are cases where an alienably possessed noun in *tu-* lacks a corresponding base verb; for instance, no verb **qartsu* ‘kick’ is attested besides the noun
 19991 *tuqartsu* ‘kick (n)’, which is used with *lxt* ‘throw, release’ as in (225) (note that the
 19992 *tu-* prefix here is neither the indefinite possessor nor the numeral ‘one’ prefixes).
 19993 The only related verb is the denominal labile verb *suqartsu* ‘kick’ (used only
 19994 for animals, kicking with the rear limbs), which comes from the action nominal
 19995 *tuqartsu* ‘kick’ (n) (§20.3.2).

- 19997 (225) *wi-rqo nutcu tuqartsu tʰa-lxt nur-ŋu*
 3SG.POSS-throat DEM:LOC kick AOR:3→3'-throw SENS-be
 19998 ‘He kicked her throat.’ (Norbzang 2012, 292)

19999 In this case, it is most likely that the base verb **qartsu* ‘kick’ did exist at some
 20000 stage but was lost, only leaving derived words.

20001 16.4.6 Inalienably possessed bare action nominals

20002 Bare action nominals lack any nominalization affix. They are inalienably pos-
 20003 sessed (§5.1.2), and take the indefinite possessor prefixes *tu-* or *tr-*, very similar
 20004 in function to the *tu-* action nominals and in form to the bare infinitives (§16.2.2).

20005 They can refer to the action itself, as in *tu-suṣo* ‘thought’ from the transitive
 20006 verb *suṣo* ‘think’ or the way an action is performed, as *wi-ti* ‘way of saying’, ‘word-
 20007 ing’, ‘expression’ from *ti* ‘say’. They can also be concrete nouns (Table 16.6). In the
 20008 case of transitive verb, these nouns refer to an instrument used to perform the
 20009 action, or resulting from the action (*tr-tsʰor* ‘nail’ from *tsʰor* ‘attach’, on which
 20010 see §18.5.3). In the case of intransitive verbs, bare action nominals can refer to
 20011 an object having a property described by the verb (for instance *tr-ro* ‘surplus,
 20012 leftover’ from *ro* ‘be in surplus, be protruding’). Note the presence of a borrow-
 20013 ing from Tibetan among these verbs (*fkaβ* ‘cover’ from ད୍ଵ୍ରାପ୍ ད୍ଵ୍ରାପ୍ ‘cover (past)’),
 20014 showing the productivity of this type of derivation.

20015 For some examples, the semantic relationship between the bare action nomi-
 20016 nal and the base verb is not transparent anymore; for instance, *tu-ŋjor* ‘helper’

Table 16.6: Bare action nominals designating concrete objects

Noun	Base verb
<i>tr-ro</i> ‘surplus, leftover’	<i>ro</i> ‘be in surplus, be protruding’
<i>tr-fkaβ</i> ‘lid’	<i>fkaβ</i> ‘cover’
<i>tr-çpʰyt</i> ‘patch’ (n)	<i>çpʰyt</i> ‘patch’(vt)
<i>tr-tsʰoꝝ</i> ‘nail’	<i>tsʰoꝝ</i> ‘attach’ (or ‘plant’)

20017 apparently derives from *njɔꝝ* ‘glue, paste’ (possibly through the sense ‘(person)
 20018 attached to oneself’).

20019 Some property nouns, which are derived from adjectival stative verbs (§5.1.2.7)
 20020 without nominalization *x-/y-* prefix (§16.5.2), are also bare action nominals. Ta-
 20021 ble 16.7 presents a list of these property nouns and their respective base verbs
 20022 (among which *may* ‘be many’ is borrowed from ~~ək̚~~ *may* ‘be many’).

Table 16.7: Property nouns derived from stative verbs

Property Noun	Base verb
<i>tr-mbe</i> ‘old thing’	<i>mbe</i> ‘be old’
<i>uu-do</i> ‘old thing’	<i>do</i> ‘be old (of plants)’
<i>uu-kʰe</i> ‘nasty’	<i>kʰe</i> ‘be stupid’
<i>uu-may</i> ‘in big groups’	<i>may</i> ‘be many’

20023 Intransitive verbs in *a-* are correlated with inalienably possessed action nom-
 20024 nials with the *tr-* indefinite possessor prefix, for instance *açqʰe* ‘cough’ (vi) and
 20025 *tr-çqʰe* ‘cough’ (n). Two hypotheses can be proposed to account for such pairs.

20026 First, one can argue that the base forms are the verbs, and that the inalien-
 20027 ably possessed noun are derived from them; in this view the *a-* element is ab-
 20028 sorbed the possessive prefixes, and leaves no trace in the possessive paradigm:
 20029 the 2SG and 2PL of *tr-çqʰe* ‘cough’ are *nr-çqʰe* ‘your_{SG} cough’ (226) *nuu-çqʰe* ‘your_{PL}
 20030 cough’, whereas one would have expected these two forms to have become ho-
 20031 mophonous due to vowel fusion (2PL *†nuu-rrçqʰe* realized as /nrçqʰe/ like the 2SG,
 20032 §5.1.1.1, §12.3).

20033 Second, it is also possible that *açqʰe* ‘cough’ (vi) (and other verbs of the same
 20034 type) derives from *tr-çqʰe* ‘cough’ by the *a-* denominational prefix (§20.2.1).

16 Non-finite verbal morphology

- 20035 (226) *nɣ-cq^he uβry-yvzu?*
 2SG.POSS-cough RH.Q-exist:SENS
 20036 ‘You don’t have cough, have you?’ (conversation, 2013-11-12)

The functional proximity between bare action nominals and *tu-* action nominals is illustrated by example (227), where both types of nominals (from different verbs) appear in parallel contexts.¹⁵

- | | | |
|-------|--|---|
| 20040 | (227) <i>ur-ti</i> | <i>tci mu-pjy-naχtcuwy</i> ,
3SG.POSS-expression also NEG-PST.IPFV-be.the.same |
| 20041 | <i>ur-tu-su-γzirja</i> | <i>kuny mu-pjy-naχtcuwy</i>
3SG.POSS-NMLZ:ACTION-CAUS-be.aligned also NEG-PST.IPFV-be.the.same |
| 20042 | <i>ma,</i> | |
| | LNK | |
| 20043 | 'The words for (father and mother) were different (between common
and honorific register), and the respective orders (in which 'mother' and
'father' appear) were also different.' | (160706 apa ama, 7-8) |
| 20044 | | |
| 20045 | | |

Given the fact that the only formal difference between the verb and the noun in this formation is the presence of a possessive prefix on the noun, there are cases where the historical relationship between the noun and the verb is ambiguous. The inalienably possessed nouns *tx-rmi* ‘noun’ and *tx-rzaš* ‘time’ synchronically look like bare action nominals derived from the semi-transitive verbs *rmi* ‘be called’ and *rzaš* ‘spend a night’. However, there may be comparative evidence that these verbs are back-formation from the nouns (§20.8.1).

Formally irregular bare action nominals are rare. The inalienably possessed noun *tu-nja* ‘debt’ derives from the transitive verb *ya* ‘buy on credit, owe’, which takes as object the amount of money owed (§20.10.1). The stem of the noun has an additional *n-* prefix, which may reflect a reduced allomorph **t-* of the *tu-* action nominal prefix, with further automatic nasalization to *n-* before nasal consonant (Jacques 2014b).

Bare action nominals are restricted to a few verbs. However, it is likely that they were more common at an earlier stage, as suggested by the existence of bare infinitives (§16.2.2) and by the development of voice derivations from the reanalysis of denominal prefixes (§20.10).

In some cases, the direction of derivation between inalienably possessed noun and verb deserves a more detailed discussion. The noun *tu-ngo* 'disease' could

¹⁵This sentence is a metalinguistic comment on the phenomenon described in §9.2.2.2, examples (183) and (182).

be analyzed as deriving from the verb *ngo* ‘be ill’, but it is preferable to suppose that the noun is primary, and that the verb takes an irregular allomorph of the denominal *nu-* prefix (§20.7.1).

We also find inalienably possessed nouns without a corresponding base verb, but which may originate from bare action nouns of lost base verbs. For instance *tr-re* ‘laugh (n)’ is a noun expressing an action, but whose *tr-* is an indefinite possessor prefix and not the action or abstract noun prefix, as shown by (228) where it is replaced by the 3SG possessive *u-* prefix.

- (228) *u-re ci emtay ny-clay*
 3SG.POSS-laugh INDEF IDPH(I):laugh.suddenly IFR-drop
 ‘She suddenly let a laugh escape.’ (2002 qaCpa, 100)

The verbs related to *tr-re* ‘laugh (n)’, the adjectival stative verb *sre* ‘be ridiculous’ and the labile verb *nre* ‘laugh’ (§14.5.1), are both denominal and derive from it. However, comparative evidence suggests that this noun itself derives at an earlier stage from a verb, which was replaced by denominal verbs in Japhug.

16.4.7 Action nominal compounds

Action nominal compounds, like bare action nominals (§16.4.6), lack any nominalization affixes. Unlike other noun-verb compounds such as actor nominal compounds, which are rare and sporadic (§5.5.5.2), action nominal compounds are a well-identified grammatical category. As with other compound nouns, the first element (the nominal root) is nearly¹⁶ always in *status constructus* form (§5.4). For instance, the action nominal *c^hṛts^hi* ‘alcohol drinking’ is built from the noun *c^ha* ‘alcohol’ (with regular vowel alternation to *c^hṛ-*) and the transitive verb *ts^hi* ‘drink’. When the incorporated noun is originally inalienably possessed, the indefinite possessor prefix (§5.1.2.1) is removed, as in *ylutçṛt* ‘removing dung out of the stable’ (to be used as fertilized) from *tuu-yli* ‘dung’ and *tçṛt* ‘take out’.

The nominal element generally corresponds to the object of the verb as in *c^hṛts^hi* or *ylutçṛt* (§5.5.5.2). There are however also cases of goal or adjunct being incorporated, as in *q^haru* ‘look back’ from *u-q^hu* ‘after, back’ (*status constructus q^ha-*) with the intransitive verb *ru* ‘look at’ (§14.2.4) and *kṛtç^hu* ‘headbutt’ from the inalienably possessed noun *tuu-ku* ‘head’ (*status constructus kṛ-*) and the verb *tç^hu* ‘gore’ (§5.5.5.3).

¹⁶Vowel alternation does not take place in the case of some very productive constructions, such as that with *k^hramba* ‘lie’ treated below and in §24.4.3.3.

20096 These nouns mainly occur with light verbs such as *lxt* ‘release’ (§22.4.2.2) or
 20097 *βzu* ‘make’ (§22.4.2.1) as in (229), but are also found in other constructions as in
 20098 (230), where a free object *c^ha* ‘alcohol’ with the bare infinitive *u-ts^{hi}* can also be
 20099 used (see §17.3.2.2). It is thus likely that the action nominal compounds originate
 20100 (at least in part) from the coalescence of nouns with bare infinitives.

- 20101 (229) *uzo nuu tatpa ta-ta* *ma q^haru* *mucin zo*
 20102 3SG DEM faith AOR:3→3'-put LNK look.back at.all EMPH
 20103 *nuu-pa-lxt* *ny tx-ari* *jnu-ŋu.*
 20104 NEG-AOR:3→3':DOWN-release LNK AOR:UP-go[II] SENS-be
 ‘He had faith, did not look back (downwards) at all and (succeeded in)
 going up to (the abode of the gods). (Norbzang, 129)
- 20105 (230) *c^hyt^{hi}* *ko-yy-tc^hom* *tce*
 20106 alcohol.drinking IFR-CAUS-be.too.much LNK
 ‘He had drunk too much alcohol.’ (150829 jidian-zh, 16)

20107 Compounds with *rpu* ‘bump into’ or *tce^hu* ‘gore’ as second element can be built
 20108 productively with the meaning ‘hit with X’ and ‘stab with X’ in collocation with
 20109 *lxt* ‘release’, X corresponding to the first element of the compound. For instance,
 20110 in (231) we find the nonce formation *βzyn-rpu* ‘hitting with a monastic robe’,
 20111 whose first element *βzyn* ‘monastic robe’ comes from Tibetan དག་ན་ *gzan* ‘monastic
 20112 robe’, a rather incongruous action which cannot possibly have been lexicalized.

- 20113 (231) *u-βyo* *nuu puu-ari* *ny, βzyn-rpu* *βja* *zo*
 20114 3SG.POSS-FB DEM AOR:DOWN-go[II] ADD robe-bump completely EMPH
 20115 *c-ta-lxt* *jnu-ŋu.*
 20116 TRAL-AOR:3→3' SENS-be
 20117 ‘(As he_i fell down the throat of the giant snake_j) his lama_k went down
 (to the place where the snake was) and hit it_j repeatedly with his_k
 monastic robe (to force it_j to spit him_i out).’ (2003 kandZislama, 69)

20118 The patient of the hitting action, if overt, is marked with the relator *u-ta_s*
 20119 ‘on, above’ (§8.3.4.3) as in (232), with the compound *βruurpu* ‘hitting with horns’
 20200 (sideways, not goring) from *ta-βruu* ‘horn’.

- 20121 (232) *jla* *kua a-ta_s βruu-rpu* *ta-lxt*
 20122 hybrid.yak ERG 1SG-on horn-bump AOR:3→3'-throw
 ‘The hybrid yak hit me with his horn.’ (elicited)

20123 In addition, we find action nominal compounds whose incorporated noun ex-
 20124 presses the manner of the action, rather than the object, the goal or the instru-
 20125 ment as in the previous cases.

20126 First, the noun *kʰramba* ‘lie’ can be compounded (without vowel alternation)
 20127 with transitive or intransitive verbs, for instance with the verb *tsʰi* ‘drink’ as *kʰramba-*
 20128 *tsʰi* in (233). These nouns, in collocation with *βzu* (§22.4.2.1, have the meaning
 20129 ‘pretend to *X*’. Note that the compounding with *kʰramba* does not saturate the
 20130 object position, and has no antipassivization effect: the object *cʰa* ‘alcohol’ is
 20131 overt in (233).

- 20132 (233) *zara kuu [cʰa nu kʰramba-tsʰi] ka-βzu-nuu*
 3PL ERG alcohol DEM lie-drink AOR:3→3'-make-PL
 20133 ‘They pretended to drink alcohol.’ (Norbzang 2005, 100)

20134 Second, the lexicalized participle *kuzya* ‘a long time’ can be compounded with
 20135 a verb root as *kuzyy-* (here with vowel alternation). These compounds also occur
 20136 with light verb *βzu*, and the collocation means ‘do *X* for a long time’ as in (234).

- 20137 (234) *kuzyy-car zo jy-βzu-nuu*
 long.time-search EMPH IFR-make-PL
 20138 ‘They searched for it for a long time.’ (elicited)

20139 In these constructions, the verb *βzu* ‘make’ takes the person indexation of sub-
 20140 ject and object (§24.3.5), as well as the orientation preverbs selected by the verb
 20141 in the compound, for instance EASTWARDS like *tsʰi* ‘drink’ in (233) and WEST-
 20142 WARDS like *car* ‘search’ in (234). Additional examples of these constructions are
 20143 discussed in §24.4.3.3 (see also Jacques 2016a: 252).

20144 Some action nominal compounds can serve as basis for incorporating deno-
 20145 minal verbs. The incorporated object sometimes saturates the object function,
 20146 and the resulting incorporating verbs are intransitive, as in the case of *yucʰyt-*
 20147 *sʰi* ‘drink alcohol’ or *yuylutzrt* ‘remove dung out of stable’ from *cʰytsh* ‘alcohol
 20148 drinking’ and *ylutzrt* ‘removing dung out of the stable’, respectively. In the case
 20149 of *brurpu* ‘hitting with horns’ however, the resulting verb *mubrurpu* ‘hit with
 20150 horns’ is transitive, the oblique argument marked with *wi-tar* ‘on, above’ in the
 20151 construction in (232) being promoted to direct object status. It is not possible to
 20152 derive a denominal verb from all of the Noun+*rpu* or Noun+*tshu* compounds.

20153 A complete list of incorporating denominal verbs and the corresponding action
 20154 nominal compounds is provided in §20.13. There are also action nominals built
 20155 by compounding two verb roots (§5.5.2.1), which serve as the basis for compound
 20156 verbs by way of denominal derivation (§20.12).

20157 16.5 Other deverbal nouns

20158 This section present vestigial nominalization affixes, which despite of their rarity
 20159 are however important for historical linguistics: the *-z* suffix and the *x/y-* prefix.

20160 16.5.1 Nominalization *-z* suffix

20161 Japhug has five inalienably possessed nouns derived from verbs by means of a
 20162 nominalizing *-z*¹⁷ (Table 16.8), three of which take the indefinite possessor prefix
 20163 *tx-* (§5.1.2.1).¹⁸

Table 16.8: Traces of the nominalization *-z* suffix in Japhug

Noun	Base verb
<i>tx-rkuz</i> ‘parting present’	<i>rku</i> ‘put in’
<i>tx-scoz</i> ‘letter, writing’	<i>sco</i> ‘see off, accompany’
<i>u-mnoz</i> ‘preparation’	<i>mno</i> ‘prepare’
<i>u-ŋjiz</i> ‘wish’	<i>ŋjit</i> ‘think of’
<i>tx-rkoz</i> ‘special’, ‘on purpose’	<i>rko</i> ‘be hard’

20164 The first two nouns *tx-rkuz* ‘parting present’ and *tx-scoz* ‘letter, writing’¹⁹ are
 20165 object nominalizations. The former *tx-rkuz* ‘parting present’ is biaxial possessed noun, whose possessor corresponds to the recipient (§5.1.2.13). The ety-
 20166 mological relationship between *tx-rkuz* and *rku* ‘put in’ is obvious when the use
 20167 of this verb in the sense of ‘give as a present to take away’ (put in someone’s
 20168 luggage) is considered, as in (235).

20170 (235) <i>tce tó-wy-z-ryŋgat</i>	<i>tce, tcendyre numuu kuu, icqʰa nuu,</i>
	<i>LNK IFR-INV-CAUS-prepare.to.leave LNK LNK DEM ERG FILLER DEM</i>
20171 <i>tuu-ci</i>	<i>tuu-tx-ste to-rku. tce 'kuuki</i>
	<i>INDEF.POSS-water ONE-INDEF.POSS-bladder IFR-put.in LNK DEM.PROX</i>

¹⁷The *-z* nominalizing suffix, though rare in Japhug, is of Sino-Tibetan origin. In Situ, the corresponding nominalizing *-s* suffix is much more common (Jacques 2003), and Tibetan and Chinese have traces of a cognate suffix (Jacques 2016c).

¹⁸Nouns in *-z* such as *tx-rtsuz* ‘number’ cannot be counted as a Japhug-internal derivation from *rtsi* ‘count’: both the noun and the verb come from Tibetan, respectively from 計 *rtsis* ‘calculation’ and 算 *rtsi* ‘calculate’ (Hill 2014b).

¹⁹This noun is possibly borrowed from Situ (Jacques 2003).

- 20172 *nv-rkuz* *ŋu'* *to-ti.*
 2SG.POSS-present be:FACT IFR-say
 20173 ‘He prepared his departure, and gave him a bladder full of water to take
 20174 with him, and said ‘this is your departing present’ (28-smAnmi.txt,
 20175 264–265)

20176 The verb *rku* ‘put in’ can even occur with its derived noun *tr-rkuz* ‘parting
 20177 present’ in the *figura etymologica* construction in (236) (the verb *βzu* ‘make’ can
 20178 alternatively be used instead of *rku* ‘put in’).

- 20179 (236) *a-me* *kui a-rkuz* *rŋuił* *ta-rku*
 1SG.POSS-daughter ERG 1SG.POSS-present money AOR:3→3'-put.in
 20180 ‘My daughter gave me some money (as present for my departure)
 20181 (elicited)

20182 The other nominalizations in -z are all abstract nouns. The form *u-ŋjiz*, which
 20183 derives from the transitive verb *ŋjít* ‘think of’, ‘miss’, ‘remember’, results from
 20184 the simplification of a complex coda *-ts to -z. This noun only occurs in collo-
 20185 cation with motion verbs, and is preceded by a finite or infinitive complement
 20186 clause (§24.6.3.3). The whole construction has the meaning ‘want to X’, where
 20187 X refers to the content of the complement clause; the experiencer is encoded by
 20188 the possessive prefix on *u-ŋjiz*, as illustrated by (237).

- 20189 (237) *tce azo nutcu* *ky-ce a-ŋjiz* *máj-yi* *tce*
 LNK 1SG DEM:LOC INF-go 1SG.POSS-want NEG:SENS-come LNK
 20190 ‘I don’t want to go there.’ (150909 hua pi-zh, 22)

20191 The noun *u-mpoz* ‘preparation’ is also only attested in a collocation (with the
 20192 verb *βzu* ‘make’ as in 238). The transitive verb *m̥yo* ‘prepare’ from which it derives
 20193 is itself the irregular causative of *no* ‘be prepared’ (§17.3.1). A -z-less bare action
 20194 nominal *u-m̥yo* ‘preparation’ (§16.4.6) is also attested.

- 20195 (238) *pju-njø* *cunŋgu tce* *u-mpoz* *tú-wy-βzu*
 IPFV-be.damaged before LNK 3SG.POSS-preparation IPFV-INV-make
 20196 *ra*
 be.needed:FACT
 20197 ‘One has to take preparations before it gets damaged.’ (elicited)

20198 The property noun *u-rkoz* ‘special’ (239), probably derived from *rko* ‘hard’,²⁰
 20199 is used adverbially (with the 3SG or the indefinite possessor prefix) as *tr-rkoz*

²⁰This etymology is however uncertain, as it would be the only noun of this type from an intransitive verb, and besides the semantic relationship is not entirely transparent.

20200 ‘specially’, ‘on purpose’. This meaning is however frequently expressed by the
 20201 borrowing 专门 <zhuānmén> ‘specially, on purpose’).

- 20202 (239) *wi-rmi* *wi-rkoz* *me.*
 3SG.POSS-name 3SG.POSS-special not.exist:FACT
 20203 ‘There is no specific name (for this type of kinship relationship).’ (140425
 20204 kWmdza06, 149)

20205 16.5.2 Nominalization *y-/x-* prefix

20206 A handful of nouns, most of them inalienably possessed, are derived from intransitive verbs by means of a velar prefix *y-* or *x-*, harmonizing in voicing with the
 20207 initial consonant of the stem since the voicing contrast is neutralized in preinitial
 20208 position (§4.2.1.7). These nouns are lexicalized ancient subject participles (§16.1.1,
 20209 §16.8.1) which underwent the same phonological change as that observed with
 20210 the velar animal class prefix (§5.6.2), that has a syllabic allomorph *ku-* and re-
 20211 duced allomorphs *y-* or *x-*.

20213 The reduced *y- / x-* prefix only derives nouns from intransitive verbs with
 20214 monosyllabic stems, without consonant clusters. Some of the nouns in Table 16.9
 20215 have cognates in other Rgyalrong languages with reduced prefixes. For instance,
 20216 *yndzrβ* has an exact cognate in Tshobdun: *yndʒov* ‘fire’ (Sun & Blogros 2019: 214).
 20217 The noun *w-yŋju* has two corresponding forms in Tshobdun: *-k'jú?* ‘window’ (Sun
 20218 & Blogros 2019: 609) with a reduced uvularized prefix, and *kə'ju?* ‘hole’ (Sun &
 20219 Blogros 2019: 374) with a non-reduced prefix.

Table 16.9: Irregular subject nominalizations in *y-* and *x-*

Noun	Base verb	Reference
<i>yndzrβ</i> ‘disastrous fire’	<i>ndzrβ</i> ‘burn’	
<i>w-yŋas</i> ‘disaster’	<i>ŋas</i> ‘be black’	
<i>w-yŋu</i> ‘orifice’	<i>yŋu</i> ‘be opened’	
<i>w-xso</i> ‘empty, normal’	<i>so</i> ‘be empty’	§5.1.2.7
<i>w-yrom</i> ‘dried thing’	<i>rom</i> ‘be dry’	

20220 The noun *tuu-xpa* ‘one year’, although derived from the verb *pa* ‘pass X years’
 20221 and having an additional *x-* element, does not belong to this category, see §7.3.1.7
 20222 and §7.3.4.3.

20223 The noun *tu-yṇi* ‘friend, ally’ also belongs to this category, though the base
 20224 verb does not exist in Japhug. It is a near-exact cognate of Tibetan རྒྱନ དྲ୍ୱା: *gnyen* ‘friend,
 20225 relative’, a noun derived from the adjective རྒྱྙྱ: *ne* ‘near’.

20226 16.6 Converbs

20227 This section discusses several non-finite verb forms which exclusively occur
 20228 in subordinate clauses other than relative and complement clauses. Other verb
 20229 forms which might be labeled as conversbs, in particular some uses of the velar
 20230 infinitive, are treated in previous sections (§16.2.1.7).

20231 16.6.1 Gerund

20232 The gerund is built by prefixing *sṛ-* or *sṛz-* to the verb stem with partial reduplica-
 20233 tion of the final syllable. It clearly derives from the oblique participle (§16.1.3,
 20234 §16.8.2), but differs from the latter by the impossibility of adding orientation or
 20235 possessive prefixes, by the obligatory reduplication, and by the absence of the
 20236 allomorphs *z-* and *sṛy-*.

20237 Given the fact that the gerund is marked by both the prefix *sṛ-/sṛz-* and the
 20238 reduplication, I only gloss GER under the prefix, and leave the reduplication un-
 20239 glossed; for instance in (240) *sṛ-rgu~rga* is glossed GER-be.happy instead of the
 20240 more explicit but burdensome GER-GER~be.happy.

- 20241 (240) [sṛ-rgu~rga] *kui jo-nu-ce*
 GER-be.happy ERG IFR-VERT-go
 20242 ‘He went back home happy.’ (140516 yiguan ganlan-zh, 141)

20243 This section reviews the morphology of the gerund (§16.6.1.1), §16.6.1.2), then
 20244 discusses the syntactic properties of gerundive clauses and their meaning (§16.6.1.3),
 20245 and finally presents some cases of lexicalized gerunds (§16.6.1.4).

20246 16.6.1.1 Allomorphy

20247 The distribution of the *sṛ-* and *sṛz-* allomorphs is illustrated in Table 16.10. The *sṛz-*
 20248 allomorph of the gerund prefix is found when the verb stem contains a sonorant
 20249 initial syllabic prefix (like *nu/y-*, *ru/ry-*, *yu/yy-* etc), while the *sṛ-* allomorph
 20250 appears in all other contexts, in particular with monosyllabic stems. Verbs with
 20251 a stem in *a-* undergo vowel merger *sṛ-y-* to /sṛ/, as in *sṛmdzudzu* ‘sitting’ from
 20252 *amdzu* ‘’. The *sṛ-* allomorph can also optionally be used in all contexts.

Table 16.10: Examples of gerunds

Base verb	Gerund
<i>tu</i> ‘exist’	<i>syr-tuu~tu</i>
<i>mu</i> ‘fear’	<i>syr-muu~mu</i>
<i>rŋgu</i> ‘lie down’	<i>syr-rŋguu~rŋgu</i>
<i>amdzu</i> ‘sit’	<i>syr-AMDZU~MDZU</i>
<i>nŋre</i> ‘laugh’	<i>syrz-nŋruu~re</i>
<i>nŋrte</i> ‘wear (head cover)’	<i>syrz-nŋrtuu~rte</i>
<i>yŋwu</i> ‘cry’	<i>syrz-yŋwuu~wu</i>

Verbs whose stem already contains a reduplication are not triplicated. For instance, the gerund of *nuqambumbjom* is *syr(z)-nuqambumbjom*, not the impossible form $\dagger\text{syr}(z)\text{-nuqambumbumbjom}$.

As in other reduplicated forms (§4.1), partial reduplication in the gerund disregards morpheme boundaries. In (241), the allomorph *nuy-* of the applicative has a coda *-y-* (§17.2.1.4, §17.4.2) which resyllabifies and becomes the preinitial of the next syllable of the verb stem; as such it undergoes partial reduplication, resulting in *syrznuymuymu* rather than the incorrect form $\dagger\text{syrznuymumu}$.

- (241) *tce [syrz-nuy-mu~ymu] zo ku-χse nui-ra.*
 LNK GER-APPL-fear EMPH IPFV-feed[III] SENS-be.needed
 ‘It_i has to feed it_i while being afraid of it_i’ (24-ZmbrWpGa, 110)

Some lexicalized gerunds have slightly irregular forms (§16.6.1.4), but otherwise gerund formation is very regular. However, there are traces of the *sry/x-* allomorph remaining as alternative gerund forms of some verbs. For instance, the intransitive motion verb *ce* ‘go’, next to the regular gerund *sryce*, also has the form *srxce*. Like the oblique participle *w-sry-ce* (§16.1.3.1), the gerund *srxce* was derived with the *sry-* allomorph, with resyllabification of the final *-x-* and its inclusion in the partial reduplication of the last syllable, like *syrznuymuymu* above. Since in the case of oblique participles the *sry-* allomorph is only found with monosyllabic verbs, in the corresponding gerund form the *-y/x-* ex-crescent element necessarily resyllabifies and undergoes partial reduplication.

16.6.1.2 Polarity prefixes

Gerunds cannot bear possessive or orientation preverb, but are attested with the negative prefix *mr-*, as in (242) with the negative gerund *mr-sry-ceu~ce* ‘not going’

20276 in collocation with the noun *tui-sum* ‘mind’, here meaning ‘not willing, unwillingly,
20277 reluctantly’.

- 20278 (242) *tcendyre tx-pi ni kuu li [ndzi-sum*
LNK INDEF.POSS-elder.sibling DU ERG again 3DU.POSS-mind
20279 *my-sy-cui-ce] zo ny-ta-ndzi*
NEG-GER-go EMPH IFR-put-DU
20280 ‘The two elder brothers reluctantly left (the ducks) alone.’ (140510
20281 fengwang-zh, 40)

20282 The form of the negative prefix is *my-* with all verbs, except for the lexicalized
20283 *masyrurju* ‘quietly, in secret’ (§16.6.1.4); the form *ma-* is perhaps due to the fact
20284 that the base verb *arju* ‘speak’ has an initial *a-* vowel; however, other verbs in *a-*
20285 have the *my-* allomorph, for instance *my-sy-ycq^hu~cq^he* ‘without coughing’ from
20286 *aq^he* ‘cough’.

20287 16.6.1.3 Gerundive clauses

20288 Gerunds are non-finite forms but preserve the verb’s argument structure, and
20289 gerundive clauses can contain overt intransitive subjects (243 and 242 above) or,
20290 very rarely, objects (244).

- 20291 (243) *txcime nunu kuu [u-qom sy-tuu~tob] kuu nuara*
young.lady DEM ERG 3SG.POSS-tear GER-come.out ERG DEM:PL
20292 *t^hut^hyci pui-kui-fse ra lonba zo pjy-fcyt pui-nyu.*
something AOR-SBJ:PCP-be.like PL all EMPH IFR-tell SENS-be
20293 ‘The young lady told everything that had happened while shedding
20294 tears.’ (140428 mu e guniang-zh, 208)
- 20295 (244) *[u-rte syz-nui-tuu-ta] jy-ari*
3SG.POSS-hat GER-AUTO-put AOR-go[II]
20296 ‘He went away wearing his hat.’ (elicited)

20297 Gerundive clauses are always subordinate to a main finite clause, and express
20298 a background action or state occurring at the same time as that referred to by the
20299 main verb; they can nearly always be translated either by a gerund in English or
20300 by a ‘while’ clause (§25.3.4.2, §25.4).

20301 Gerundive clauses, like converbial infinitival clauses (§16.2.1.7), can be followed
20302 by the ergative *kuu* (example 243 above), the emphatic *zo* (241 and 242, §26.1.1.5)
20303 or both (as in 245 below). Bare gerundive clauses are also common, as in (244) and

20304 246 below). No semantic difference between bare gerundive clauses and gerundive clauses followed by *ku* or *zo* can be brought to light.

20306 The focus marker *kuny* can also follow a gerundive clause with the meaning
20307 ‘even Xing’ as in (248) below.

20308 The (intransitive or transitive) subject of the gerundive clauses is often coref-
20309 erent with that of the main clause, as in (244) above and (245) below.

- 20310 (245) *trcime ra rca sy-mbu~mbyom zo ku,*
young.lady PL UNEXP:DEG GER-be.in.a.hurry EMPH ERG
20311 *icq^ha nyki, rfylpu u-tcu nura p^y-βde-nu tce*
the.mentioned FILLER king 3SG.POSS-son DEM:PL IFR-leave-PL LNK
20312 *jo-nu-ce-nu*
IFR-VERT-go-PL
20313 ‘The princesses left the princes in a hurry and went back home.’ (140508
20314 shier ge tiaowu de gongzhu-zh, 162)

20315 There is however no strict syntactic constraint on coreference between the
20316 subject of the gerundive clause and that of the main clauses. Other types of con-
20317 figurations are attested. In (246), the intransitive subject of the gerundive clause
20318 *tr-pytso nu* ‘child(ren)’ is the object, not the subject, of the main clause verb *ku-*
20319 *z-ryzi-nu*.²¹

- 20320 (246) *[tr-pytso nu sy-ymdzui~mdzui] ku-z-ryzi-nu*
INDEF.POSS-child DEM GER-sit IPFV-CAUS-stay-PL
20321 ‘They (used to) put the children in sitting position (after having covered
20322 them in cloth).’ (140426 tApAtso kAnWBdaR 2)

20323 Coreference between the possessor of the subject in the gerundive clause and
20324 the object of the main clause as in (243) and (242) above is also attested. It is par-
20325 ticularly common in inalienably possessed noun+intransitive verb collocations
20326 where the experiencer is marked as the possessor on the inalienably possessed
20327 noun (§22.4), such as *tui-sum,ce* ‘want’, *tui-βjiz,yi* ‘wish’ (§22.4.1.1) or *tr-mbru,ŋgu*
20328 ‘get angry’ as in (247) (§22.4.1.5).

- 20329 (247) *u-mbru sy-ŋgu~ŋgwi ku zo jo-nu-ce.*
3SG.POSS-anger GER-get.angry ERG EMPH IFR-VERT-go
20330 ‘He went back home angry.’ (150826 baoliandeng-zh, 95)

²¹In this example I assume that *tr-pytso nu* belongs to the gerundive clause, with zero anaphora in the main clause; the opposite analysis could also be considered.

20331 The opposite configuration, with the possessor in the main clause coreferent
 20332 with the subject of the gerundive clause, is also attested, as in (248).

- 20333 (248) *sy-rŋgur~rŋguu kumy tui-kv̚nɔw pnu-mt̚cur tce,*
 GER-lie.down also GENR.POSS-brain IPFV-turn LNK
 20334 ‘Even lying down, one feels dizzy (one’s head is turning).’
 20335 (29-tAamtshAzkAkWndo, 57)

20336 The only example of gerund without apparent coreference between any par-
 20337 ticipant of the gerundive clause and of the main clause in the corpus is (249).
 20338 However, even here one can interpret the gerundive clause as having a non-overt
 20339 subject whose possessor would be coreferent with the subject or the object of the
 20340 main clause.

- 20341 (249) *nuu sy-rkua~rkuaan zo ty-pytso cʰúr-wy-tc̚yt
 DEM GER-be.few EMPH INDEF.POSS-child IPFV-INV-take.out
 20342 pjx-ra tce,
 IFR.IPFV-be.needed LNK
 20343 ‘People had to raise children with few (resources).’ (140426 tApAtso
 20344 kAnWBdaR, 5)*

20345 While gerunds can be built for motion verbs, in the corpus the velar infinitive
 20346 conversbs *kv-* (§16.2.1.7) are more common than gerunds to express meanings such
 20347 as ‘running’ (*kv-rjuy (ku zo)*), ‘walking’ (*kv-ŋke (ku zo)*) when occurring in a
 20348 main clause with another motion verb (for instance with *jo-nuu-če-nuu* ‘they went
 20349 away’ in 168). Motion verbs are only attested in non-motional collocations (as
 20350 in 242) above). Gerunds of motion verbs are however possible if the motion is
 20351 different from the action of the main verb, as in (250).

- 20352 (250) *sy-ŋkuu-ŋke zo pnu-ŋsui-ndza*
 GER-walk EMPH SENS-PROG-eat
 20353 ‘He is eating it while walking.’ (elicited)

20354 16.6.1.4 Lexicalized gerunds

20355 There are a few examples of adverbs from lexicalized gerunds, whose form and
 20356 meaning is not completely predictable from the base verb.

20357 The gerund *sy-xt̚ciu-xt̚ci*, from the stative verb *xt̚ci* ‘be small’ means ‘in child-
 20358 hood, when X was young, since childhood’, as in (251). Since the verb *xt̚ci* ‘be
 20359 small’ includes ‘be young’ among its range of meanings, the use of this gerund

20360 to refer to young age is not unexpected ('while being young'), but the additional
 20361 meaning 'since childhood' does not correspond to the usual function of
 20362 the gerund, which expresses an action or state taking place simultaneously with
 20363 the action of the main verb.

- 20364 (251) *sṛ-xtci~xtci zo u-mu u-wa jṛ-me.*
 GER-be.small EMPH 3SG.POSS-mother 3SG.POSS-father IFR-not.exist
 20365 'He lost his parents when he was young.' (150827 tianluo, 4)

20366 The adverb *masyrurju* 'quietly, in secret' from *arju* 'speak' is formally an an-
 20367 cient negative gerund, with the negative prefix *ma-* rather than *mṛ-*). It originally
 20368 meant 'without speaking', but its meaning has become 'in secret, without some-
 20369 one knowing' as in (252), and it can even be applied to acts involving speech as
 20370 in (253), showing that it is not semantically linked to its base verb anymore.

- 20371 (252) *tc^hemypui nura, nykinu, mu-tx-rundzaŋspa-nu jamar tce tce, uzo*
 girl DEM:PL FILLER NEG-AOR-pay.attention-PL about LOC LNK 3SG
 20372 *kui masyrurju ieq^ha c^ha nu pṛ-lwob.*
 ERG quietly the.aforementioned alcohol DEM IFR-spill
 20373 'While the girls were not paying attention, he spilled the alcohol in
 20374 secret.' (140508 shier ge tiaowu de gongzhu-zh, 80)
- 20375 (253) *uzo kui masyrurju k^hndun nu jṛ-ndun*
 3SG ERG quietly mantra DEM IFR-recite
 20376 'He recited the mantra in secret.' (2012 Norbzang, 199)

20377 The adverb *mṛsymdrla* 'in advance' (example 254), related to the verb *mda*
 20378 'arrive (time)', might also be an ancient negative gerund, but its morphological
 20379 structure is not completely clear, in particular the element *-la* and the absence of
 20380 reduplication.

- 20381 (254) *nyki tx-rjit nu mṛsymdrla zo to-ŋke*
 DEM INDEF.POSS-child DEM in.advance EMPH IFR-walk
 20382 'This child started walking early.' (elicited)

20383 16.6.1.5 *stṛ-* Gerund

20384 The Tibetan loan verb *rṛuy* 'run' has a regular gerund *sṛ-rṛu~rṛuy* 'running';
 20385 however, the adverb *stṛrṛuy* 'running' can also be derived from this verb, with a

20386 meaning identical to that of the gerund, as in (255).²² It is the only verb with the
 20387 prefix *stv-*; an exact cognate *stv̥rjɔy?* is found in Tshobdun (Sun & Blogros 2019:
 20388 610).

- 20389 (255) *stv̥rjɔy ny stv̥rjɔy zo jo-nui-pʰyo*
 running add running EMPH IFR-VERT-flee
 20390 ‘She fled back home running.’ (140504 huiguniang-zh, 131)

20391 16.6.2 Purposive

20392 The purposive converb is used in clauses meaning ‘in order to’, ‘for X to Y’, ‘so
 20393 that X does Y’. This converb originates from the oblique participle (§16.8.2). It
 20394 combines the *sv-*/*svz-* with a reduplicated verb stem like the gerund, but in addition
 20395 takes a B type orientation preverb preceded by a possessive prefix coreferent
 20396 with a core argument, as for instance *a-nuu-sv-stu~stu* ‘in order for me to believe
 20397 in it’ from the semi-transitive *stu* ‘believe’ in (256).

- 20398 (256) *tce nuunu a-nui-sv-stu~stu nura tu-nvme pjv-ŋu*
 LNK DEM 1SG-IPFV-PURP-believe DEM:PL IPFV-make[III] IFR.IPfv-be
 20399 ‘He was doing these things so that I would believe (in his predictions).’
 20400 (150904 yaoshu-zh, 104)

20401 Purposive converbs without reduplication are attested, for instance *w-mv-pjuu-*
 20402 *sv-su-spov* from *suspoꝝ* ‘pierce’ (the form with reduplication *w-mv-pjuu-sv-su-spov*-
 20403 *spov* ‘so that it would not pierce it’ is also possible) in 257 or without orientation
 20404 preverb such as *w-mv-sv-jmu~jmu* ‘so that he would not forget it’ from *jmu*
 20405 ‘forget’ in (258) (the complete form with orientation preverb is found in another
 20406 version of the same story, for instance in 259).

- 20407 (257) *tce nuu w-pa nuunu li kʰvxtu numuu,*
 LNK DEM 3SG.POSS-under DEM again platform DEM
 20408 *tui-ci, tuftsav kui pjua-su-spov*
 INDEF.POSS-water leaking.water ERG IPFV-CAUS-have.a.hole
 20409 *ŋgrvl tce, tce*
 be.usually.the.case:FACT LNK LNK
 20410 *w-mv-pjuu-sv-su-spov, numuutcu tyrym*
 3SG-NEG-IPFV-CONV:PURP-CAUS-have.a.hole DEM:LOC TOPO

²²In addition, the velar infinitive converb *kv-rjuy* can be used in the same contexts (168, §16.2.1.7).

- 20411 *kur-fse* *nú-wy-ta* *nūmabny cupa* *kur-fse*
 SBJ:PCP-be.like IPFV-INV-put otherwise flat.stone SBJ:PCP-be.like
 20412 *nú-wy-ta* *tce,*
 IPFV-INV-put LNK
 20413 ‘Under the top platform, the water, the leaking water can leak through
 20414 (the roof), and in order to prevent it from leaking through, people put
 20415 planks or flat stones there.’ (26-tChWra, 13)

- 20416 (258) [*kur-lsy acyβ nui ku u-my-sy-jmu~jmut*],
 SBJ:PCP-herd Askyabs DEM ERG 3SG-NEG-PURP:CONV-forget
 20417 *u-p^hunγua* *nui tcu rdystab-pupua tc^hirdu ci* *ny-rku,*
 3SG.POSS-inside.clothes DEM LOC stone-little pebble INDEF IFR-put.in
 20418 ‘The shepherd Askyabs put a little pebble inside his clothes so that he
 20419 would not forget (to tell it).’ (2002 qaCpa, 166)

20420 Purposive converbs are most commonly found with the negative prefix *my-*,
 20421 as (257) and (258) above. Non-negative purposive converbs, as in (256), are com-
 20422 paratively much rarer.

20423 With transitive verbs, the possessive prefix can refer either to the subject (with
 20424 1SG possessive *a-* in 259) or the object (3SG possessive *u-* in 260).

- 20425 (259) *jisŋi tce tcendyre a-my-nui-sy-jmu~jmut nui*
 today LNK LNK 1SG-NEG-PURP:CONV-forget DEM
 20426 *nui-rku-t-a* *ŋu*
 AOR-put-in-PST:TR-1SG be:FACT
 20427 ‘Today I put (the pebble in my clothes) so that I would not forget (to tell
 20428 you).’ (2014-kWLAG, 515)

20429 In example (260), the purposive form *a-my-tu-sy-rpu~rpu* with subject indexation
 20430 is also possible, without meaning difference.

- 20431 (260) *kuum nui-mbṣr tce, a-ku* *u-my-tu-sy-rpu~rpu*
 door SENS-low LNK 1SG.POSS-head 3SG-NEG-IPFV-CONV:PURP-bump
 20432 *pui-p^haβ-a*
 AOR-lower-1SG
 20433 ‘As the door is low, I lowered my head so as not to bump on it.’ (elicited)

20434 Although most examples of purposive converbs have the same subject as the
 20435 main clause, this is not a syntactic constraint. In (261), it is the object of the
 20436 main clause *k^huna* ‘dog’ that corresponds to the subject of the purposive clause.

20437 Furthermore, in (257) above, the subject and object of the purposive clause are
 20438 not even arguments of the main clause.

- 20439 (261) *a-my-ku-sy-mtsur~mtsuy wuzo kuu k^huna ka-βras*
 1SG-NEG-IPFV-CONV:PURP-bite 3SG ERG DOG AOR:3→3'-attach
 20440 'He attached the dog so that it would not bite me.' (elicited)

20441 Purposive converbs, although they can be generated for most verbs without
 20442 difficulty, are very rare in the corpus, and several alternative constructions are
 20443 preferred to build purposive clauses (§25.5.4).

20444 16.6.3 Immediate

20445 The immediate perfective converb expresses that the action in the converbial
 20446 clause is immediately followed by that in the main clause ('as soon as'). It is
 20447 built by adding the B type orientation preverb and a *tu-* prefix (which may be
 20448 historically related to the homophonous prefix of action nominals, see §16.8.3)
 20449 and the verb stem I. It is the only verb form with a type B orientation preverb
 20450 (which in all other cases occurs with imperfective TAM categories) that has a
 20451 perfective value.

20452 Since there is a homophonous prefix *tu-* for second person (§14.2.1.2), the im-
 20453 mediate converb is formally identical to the second person singular imperfective
 20454 form²³ for all verbs whose stem I and stem III are identical (including all intra-
 20455 sive verbs and some transitive ones, §12.2.2.1); these forms are however easily
 20456 distinguished for transitive verbs with stem III alternation, as illustrated by Ta-
 20457 ble 16.11.

Table 16.11: Examples of the immediate perfective converb /tuu/-

	stem	meaning	2SG(→3) IPFV	IMM
intransitive	<i>sci</i>	to be born	<i>c^huu-tuu-sci</i>	<i>c^huu-tuu-sci</i>
	<i>ce</i>	to go	<i>ju-tuu-ce</i>	<i>ju-tuu-ce</i>
transitive	<i>ts^hi</i>	to drink	<i>ku-tuu-ts^hi</i>	<i>ku-tuu-ts^hi</i>
	<i>ndza</i>	to eat	<i>tu-tuu-ndze</i>	<i>tu-tuu-ndza</i>
	<i>mto</i>	to see	<i>pjuu-tuu-mtym</i>	<i>pjuu-tuu-mto</i>

²³More precisely, the 2sg form of intransitive verbs and the 2sg→3 form of transitive ones.

20458 The immediate converb cannot take any additional prefix, even possessive or
 20459 negative prefixes.

20460 The converbial clause can contain overt arguments, including absolute arguments as in (262) or transitive subjects marked with the ergative as in (263).

- 20462 (262) *u-puu pnu-tuu-vaš ny kumpyxtču jamar*
 3SG.POSS-child IPFV-CONV:IMM-hatch.out LNK sparrow about
 20463 *ma me*
 apart.from not.exist:FACT

20464 ‘Just after its chick has hatched out, it is just (as big as) a sparrow.’
 20465 (24-kWmu, 90)

- 20466 (263) *turme ra kuř pjuu-tuu-mto zo sat-nuu cti.*
 people PL ERG IPFV-CONV:IMM-see EMPH kill:FACT-PL be.AFF:FACT
 20467 ‘People kill it as soon as they see it.’ (28-qapar, 15)

- 20468 (264) *nur pjuu-tuu-βde zo turme nur pjuu-kuř-si*
 DEM IPFV-CONV:IMM-throw EMPH person DEM IPFV-GENR:S/O-die
 20469 *pjy-ŋgryl.*
 IFR.IPFV-be.usually.the.case
 20470 ‘As soon as one was thrown in there, one would die.’ (28-smAnmi, 131)

20471 There is often coreference between the arguments of the converbial clause
 20472 and those of the main clause. In (262) and (264), the subjects of the main clauses
 20473 correspond to the intransitive subject and the object of the converbial clause,
 20474 respectively. In (263) above and (265) below, both the subject and the object of
 20475 the subordinate clauses are coreferent with those of the main clauses. Example
 20476 (265) also shows that immediate converbs can have non-third person subjects,
 20477 though this is rare in the corpus.

- 20478 (265) *tut^buu nur-sy-cke tce, azo a-jas ku-tu-ndo*
 pot SENS-PROP-burn LNK 1SG 1SG.POSS-hand IPFV-CONV:IMM-take
 20479 *zo pui-nuu-čluy-a*
 EMPH AOR-AUTO-drop-1SG
 20480 ‘As the pot was burning, I dropped it as soon as I had grabbed it.’
 20481 (elicited)

20482 There is however no strict syntactic constraint on subject or object coreference,
 20483 as we also find examples where the subject of the converbial clause is not
 20484 a participant of the main clause, such as (266).

- 20485 (266) *lu-tur-fsob zo q^he tur-ryma tu-ze nuu-ŋu.*
 IPFV-CONV:IMM-be.clear EMPH LNK INF:II-work IPFV-begin[III] SENS-be
 20486 ‘It starts working as soon as the day breaks.’ (26-GZo, 71)

20487 The converbial clause nearly always followed either by the emphatic *zo* (§26.1.1.5)
 20488 and/or by a linker such as *tce*, *q^he* (266) or *ny* (262).

20489 The immediate converb commonly occurs in the corpus, but it is not the only
 20490 way to express immediate succession. Several constructions have a very close
 20491 meaning (§25.3.3.2), involving in particular the postposition *cimuma* ‘as soon as’
 20492 (§8.2.11).

20493 16.6.4 Adverb from finite verb

20494 The adverb *nufse* ‘just like that’ does not derive from a non-finite verb form, but
 20495 rather has been lexicalized from the demonstrative *nu* (§6.9.1) with the 3SG form
 20496 of the Factual Non-Past of *fse* ‘be like’ in manner clause from a serial verb con-
 20497 struction (§25.4.1.2). The range of meanings of *nufse* is however not predictable
 20498 from those of the base verb.

20499 The main meaning of *nufse* is ‘just like that, for no particular reason’ as in
 20500 (267).

- 20501 (267) *tui-rdos tc^hi muu-pui-nnur-pe my-xsi ma*
 one-piece what NEG-PST.IPFV-AUTO-be.good NEG-GENR:know LNK
 20502 *nunu nufse pjy-si*
 DEM like.that IFR-die
 20503 ‘One (of them) died just like that, I don’t know what went wrong.’
 20504 (140510 wugui, 53)

20505 It can also mean ‘for nothing, in vain’, in particular in combination with a verb
 20506 prefixed with the autive prefix (§19.1.4), as in (268).

- 20507 (268) *nunu u-mat nufse pjuu-nuu-ŋgra*
 DEM 3SG.POSS-fruit like.that IPFV-AUTO-ACAUS:cause.to.fall
 20508 *nuu-cti ma u-ryi müij-nyjts^huu*
 SENS-be.AFF LNK 3SG.POSS-seed NEG:SENS-be.useful
 20509 ‘Its fruits fall (on the ground) just like that, it is not useful as seed.’
 20510 (08-CkrAz, 53)

20511 16.7 Defective verbs

20512 Nearly all Japhug verbs have participles, infinitives and the other non-finite forms
 20513 described in this chapter. There is however a handful of defective verbs lacking
 20514 non-finite categories.

20515 The sensory existential verbs *yzyu* ‘exist’ and *maje* ‘not exist’, which present
 20516 other types of irregularities (§14.2.2), lack all non-finite forms; the nominalized
 20517 forms of the existential verbs *tu* ‘exist’ and *me* ‘not exist’ are used instead.

20518 The transitive verb *krtupa* ‘tell’ cannot be prefixed (§14.3.4), and therefore
 20519 lacks all non-finite forms.

20520 The verb *mr-xsi* ‘one does not know’ is only found in the generic negative
 20521 Factual Non-Past (§14.3.4), and the corresponding non-finite forms are provided
 20522 by the verb *suz* ‘know’.

20523 16.8 Historical perspectives

20524 The great majority of non-finite verb forms studied in this chapter take either
 20525 a velar, a sigmatic or a dental prefix. While it is necessary to distinguish many
 20526 sub-categories from a synchronic point, it is equally obvious that a diachronic
 20527 relationship exists between some of these non-finite forms. While a complete ac-
 20528 count of the history of nominalized forms in Japhug will have to wait a proper
 20529 reconstruction of proto-Gyalrongic, it is nevertheless possible to offer some pre-
 20530 liminary thoughts on the relationship between these morphological categories.

20531 16.8.1 Velar non-finite prefixes

20532 Many Trans-Himalayan languages, including Karbi and Kiranti, have productive
 20533 velar nominalization prefixes (Konnerth 2016), and traces of such prefixes can
 20534 also be found in other languages such as Tibetan (Jacques 2014d). These forms
 20535 are very probably historically related to the velar nominalization prefixes found
 20536 in Gyalrong languages, but the present chapter focuses on Gyalrong-internal
 20537 evidence.

20538 In Japhug, non-finite verb forms with velar prefixes include the following ones:

- 20539 • *kuu-* subject participles (§16.1.1)
- 20540 • *kry-* object participles (§16.1.2)
- 20541 • *kuu-* and *kry-* velar infinitives (§16.2.1)

- 20542 • Infinitival conversbs (§16.2.1.7)

- 20543 • *x-/y-* deverbal nouns (§16.5.2)

20544 In addition, three finite prefixes are likely to be related to these forms: the
 20545 2→1 *ku-* prefix (§14.3.2.3, §14.8.3), the generic S/O *ku-* prefix (§14.3.2.5), and the
 20546 circumfix *ku-...-ci* occurring in several morphological contexts (§11.4).

20547 Given the difficulty of distinguishing infinitives from participles even syn-
 20548 chronically (§16.2.1.1), it is quite obvious that these forms are ultimately related,
 20549 but accounting for the precise distribution of the forms is not trivial.

20550 In addition to the categories mentioned above, shared by all core Gyalrong
 20551 languages, Situ has a type of semi-finite participles in *kə-*, used in various types
 20552 of relative clauses (Sun & Lin 2007). In (269) for instance, the form *nə-kə-mase-ntf*
 20553 has both a participle *kə-* and a dual suffix *-ntf*; in Japhug, such combination is im-
 20554 possible: indexation suffixes (and the second person prefix *tu-*) are incompatible
 20555 with all non-finite forms studied in this chapter.

- 20556 (269) *ndzok kə-nəwetjō=ndzēs=tə ptṣērə dʒəesp̪ə*
 slightly NMLZ-be.hardworking[II]=DU=TOP then quite
 20557 *nə-kə-mase-ntf nə-ŋos*
 AOR-NMLZ-be.rich[II]-DU SENS-be[I]
 20558 ‘The two hardworking ones then became rather rich.’ (Lin 2009: 193–194)

20559 In the following, I assume that in proto-Gyalrong both semi-finite participles
 20560 of the type exemplified in (269) and subject participles as in Japhug (§16.1.1) did
 20561 exist, and were marked by the ancestor of the *ku-* prefix.

20562 The object participle in *kṛ-*, which is synchronically still homophonous with
 20563 the subject participle of a passivized transitive verb (§16.1.2.3), likely originates
 20564 from the fusion of the **kə-* participle with the passive **ŋa-* prefix (see also Sun
 20565 2006a; Sun & Lin 2007 for a suggestion in the same lines).

20566 Since only transitive verbs can have a passive form, the use of the object for
 20567 semi-transitive verbs (for instance example 79 in §16.1.2.4) must have been an
 20568 analogical extension occurring after the merger of the participle prefix and the
 20569 passive was complete.

20570 The *kṛ-* infinitive possible derives from the object participles. The pivot con-
 20571 struction where such a reanalysis could have taken place is the object of verbs of
 20572 perception such as *mto* ‘see’. When an object participial clause occurs as the ob-
 20573 ject of a verb of perception, while in some case there is no ambiguity (as in 270),
 20574 in examples such as (271) it is possible to analyze the *kṛ-* prefixed form either as

20575 an object participle (entailing a translation ‘grains that are sold like that’) or as
 20576 an infinitive (‘selling grains like that’, referring to the whole action rather than
 20577 the object).

- 20578 (270) *ma [puu-kyr-sat] nuu kyr-mto nuu puu-rpo-t-a.*
 LNK AOR-OBJ:PCP-kill DEM INF-see DEM AOR-experience-TR:PST-1SG
 20579 ‘I have seen killed ones.’ (22-pGAKhW, 22)

- 20580 (271) *tce [uu-rdos nuu kuu-fse kyr-ntsye] nuu*
 LNK 3SG.POSS-grain DEM SBJ:PCP-be.like OBJ:PCP/INF-sell DEM
 20581 *muu-puu-mto-t-a*
 NEG-AOR-see-TR:PST-1SG
 20582 ‘I have not seen its grains sold like that (unprocessed).’ (09-mi, 61)

20583 After such reanalysis took, the *ky-* infinitive, originally restricted to transitive
 20584 verbs, was extended to dynamic intransitive verbs.

20585 The nominalization *x/y-* prefix is probably the result of the application of
 20586 a sound law of presyllable reduction on monosyllables without initial cluster
 20587 (§5.6.2, §16.5.2) to the subject participle prefix. The regular *kuu-* subject participle
 20588 on monosyllabic clusterless verb stems is due to the analogical generalization of
 20589 the *kuu-* allomorph to all verb forms.

20590 The generic *kuu-* and the 2→1 *kuu-* prefixes, which occur in finite verb forms
 20591 in Japhug, are less likely to come from subject participles. Instead, as argued in
 20592 Jacques (2018c) and §14.8.3, they are traces of the semi-finite participles in Japhug
 20593 and other Northern Gyalrong languages.

20594 Figure 16.1 summarizes the pathways of reanalysis proposed in this section
 20595 and in §14.8.3. The semi-finite participle and subject participle forms are with-
 20596 out doubt historically related, but both have to be reconstructed at the proto-
 20597 Gyalrong level and the function of the original prefix from which they derive is
 20598 unclear – it is conceivable that the original prefix was completely non-finite like
 20599 the Japhug subject participle, and that the semi-finite participle is an innovation
 20600 (on the addition of person indexation markers on non-verbal predicative words,
 20601 see §14.8.3), but the opposite is equally possible.

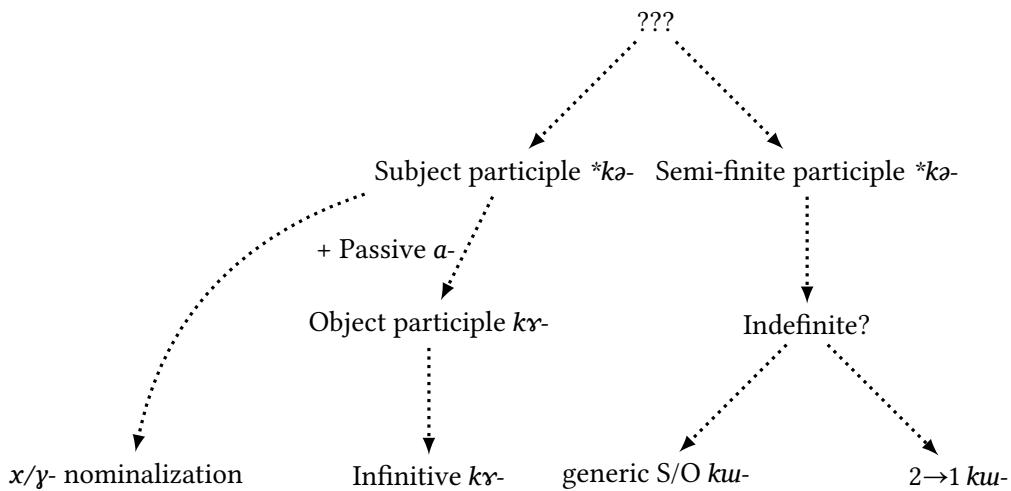


Figure 16.1: Development of velar non-finite forms from proto-Gyalrong to Japhug

16.8.2 Sigmatic non-finite prefixes

Nominalized forms involving a coronal fricative prefix, or a trace thereof, have been described in Old Chinese (Sagart 1999: 73, Baxter & Sagart 2014: 56), Tibetan (Jacques 2018b) and Jinghpao (Dài & Xú 1992: 3–4).

In Japhug, non-finite verb forms with dental fricative prefixes are very widespread, and include the following ones:

- Oblique participle (§16.1.3)
- Gerund (§16.6.1)
- Purposive (§16.6.2)

It is quite obvious that both gerund and purposive converbs derive from the oblique participle. The reduplication found in these forms (optional in the case of the purposive, see 257 in §16.6.2) presumably reflects the emphatic reduplication (§12.4.3) that can be applied to nearly all verb forms.

While derivation of gerunds from oblique participle is not a problem from a formal point of view, the exact pathway of reanalysis deserves some discussion. Given the fact that oblique participles are used to build temporal relatives ‘the time when...’ (§16.1.3.7), it is tempting to suppose that the gerund derives from

20619 this function, in absolute locative form (§8.1.9). In this view, a gerund like *syr-mndzu~mdzuu* ‘sitting’ would come from an original construction meaning ‘at
 20620 the time when X was sitting’. However, this hypothesis is difficult, because of
 20621 the very restricted nature of participial temporal relatives, which are only found
 20622 for very specific time periods that belong to common knowledge (for instance
 20623 *u-sy-ji* ‘the period when it is planted’ in example 129 in §16.1.3.7), and are not
 20624 compatible with most types of temporal clauses.

20625 Other possibilities to explain the origin of the gerund are the locative (§16.1.3.5)
 20626 and instrumental (§16.1.3.6) uses of the oblique participles. Locative participles
 20627 could account for the use of gerund with psychological verbs; for instance *syr-mu~mu* ‘fearing’ from *mu* ‘fear’ could originate from a metaphorical locative
 20628 similar to English ‘in fear’. However, the hypothesis that gerunds derive from
 20629 instrumental oblique participles is more probable due to the optional presence of
 20630 the ergative *kuu* with the gerunds (§16.6.1.3) while locative postpositions are never
 20631 found in this context. The gerunds thus probably originated from subordinate
 20632 clauses expressing reason or cause, from which they came to express manner or
 20633 simultaneous action (‘by sitting’ ⇒ ‘sitting’).

20634 The purposive converbs probably also come from the instrumental use of ob-
 20635 lique participles, but through a different pathway. As suggested in Jacques (2014a:
 20636 272), examples such as (272) may constitute the pivot construction between in-
 20637 strumental participial relatives and purposive converbs.

- 20638 (272) *yzuit^huz nur kucungur tce [tuit^hu sv-χtci]*
 20639 Selaginella DEM in.the.past LNK pan OBL:PCP-wash
pú-wy-nuu-p^hut pui-ŋgryl
 20640 IPFV-INV-AUTO-unroot PST.IPFV-be.usually.the.case
 20641 ‘In the past, people would unroot *Selaginella* (to use as) a pan cleaner.’
 20642 (16-RIWmsWsi, 107)

20643 In (272), the participial relative clause *tuit^hu sv-χtci* ‘pan cleaner’ is an essive
 20644 adjunct (in absolute form, §8.1.7) which can be translated as ‘(to use) as a pan
 20645 cleaner’. This meaning is very close to that of a purposive clause ‘in order to
 20646 clean pans’. An instrumental participial relative clause in essive function could
 20647 thus easily be reanalyzed as a purposive clause, and hence the oblique participle
 20648 as a purposive converbal.

20649 16.8.3 Dental non-finite prefixes

20650 Non-finite verbal forms taking a dental stop prefix *tū-* or *tr-* in Japhug include
 20651 the following ones:

- 20653 • Dental infinitive (§16.2.3)
- 20654 • Degree nominals (§16.3)
 - 20655 • *tu-* action nominals (§16.4)
 - 20656 • *ty-* abstract nouns (§16.4.2)
 - 20657 • Simultaneous action nominal (§16.4.3)
 - 20658 • Immediate perfective converb (§16.6.3)

20659 It is possible that all of these forms are historically related. However, given the
 20660 fact that some of the non-finite verb forms in Japhug are inalienably possessed
 20661 nouns (§5.1.2) derived by adding a possessive prefix to the bare verb stem (bare
 20662 infinitives §16.2.2 and bare action nominals §16.4.6), it is likely that at least some
 20663 of the categories listed above originate from the indefinite possessive form of
 20664 a bare infinitive or a bare action nominal, as suggested in Jacques (2016a: 236)
 20665 concerning the bare infinitives.

20666 Since bare infinitives and dental infinitives are in complementary distribution,
 20667 the former being used with transitive verbs and the latter with intransitive ones
 20668 (see §16.2.2.1 and §16.2.3.2), it is legitimate to consider the possibility that both
 20669 forms go back to a single category. The bare infinitive takes a possessive prefix
 20670 that is coreferent with the object of the verb; intransitive verbs lack an object
 20671 (semi-transitive verbs have a semi-object §8.1.5, but its morphosyntactic proper-
 20672 ties are different from those of canonical objects), and thus if a bare infinitive
 20673 were built from an intransitive verb, one would only have three choices: (i) index
 20674 the subject, (ii) use the bare stem with any possessive prefix or (iii) use a ‘dummy’
 20675 possessive prefix indicating the absence of object. It is possible to argue that den-
 20676 tal infinitives correspond to solution (iii), and that the *tu-* prefix in this form is
 20677 the indefinite possessor *tu-* (§5.1.3). In this hypothesis, dental infinitives taking
 20678 a possessive prefix (see example 195 in §16.2.3.2) are later creations, made after
 20679 the etymological origin of the *tu-* had become obscured.

20680 Proposing that *tu-* action nominals and *ty-* abstract nouns come from alienabi-
 20681 lized bare action nominals is not to be excluded, but appears to be less compelling,
 20682 since there is no complementary distribution between the former and the latter,
 20683 unlike in the case of bare vs. dental infinitives.

20684 It is also conceivable that dental infinitives come from *tu-* action nominals,
 20685 and bare infinitives from bare action nominals, respectively. In the absence of
 20686 evidence from languages other than Japhug, I leave this issue unresolved.

20687 Regardless of the origin of action nominals, it is clear that degree nominals on
 20688 the one hand, and simultaneous action nominals on the other hand, derive from
 20689 them by prefixing possessive prefixes (in degree nominals) and the numeral *tu-*
 20690 prefix, respectively (in simultaneous action nominal, §16.4.3).

20691 The origin of the immediate perfective converbs is quite puzzling. While im-
 20692 mediate converb take an obligatory type B orientation preverb, no other *tu-* non-
 20693 finite form is compatible with orientation preverbs, and moreover type B pre-
 20694 fixes normally occur with imperfective TAME categories (§15.1.1, §21.1.1). It is
 20695 conceivable that these converbs ultimately originate from action nominals, but
 20696 the pathway of morphological evolution that has lead to their creation is unclear.

20697 Figure 16.2 summarizes the hypotheses presented in this section; the dotted
 20698 arrows represent uncertain derivations.

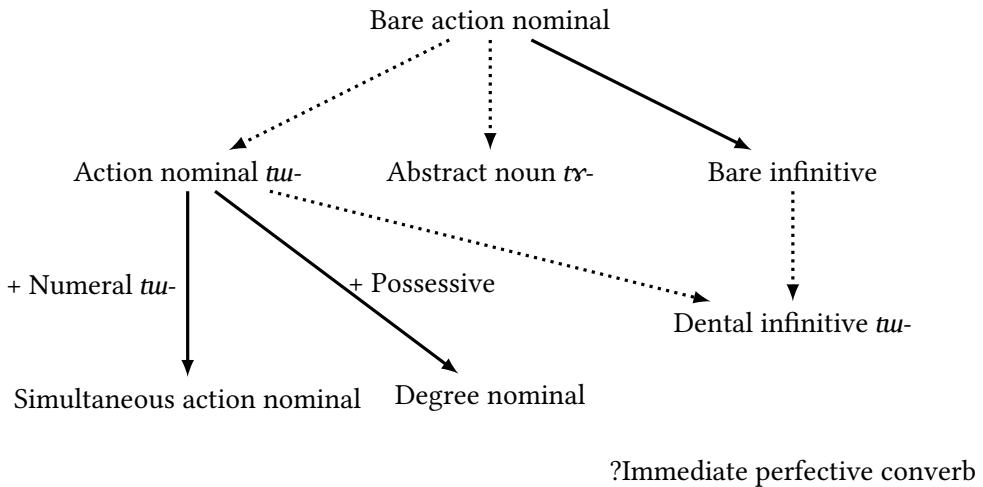


Figure 16.2: Several hypotheses to account for the historical origin of dental non-finite forms in Japhug

20699 17 Valency-increasing derivations

20700 17.1 Introduction

20701 Japhug has much fewer valency-increasing derivations than valency-decreasing
20702 ones: leaving aside fossil derivations (§19.7), only four clearly identified prefixes
20703 are found: sigmatic causative (§17.2), velar causative (§17.3), applicative (§17.4)
20704 and tropative (§17.5). The sigmatic causative however is probably the most pro-
20705 ductive of all derivational processes in Japhug, and can be combined with the
20706 other three (§11.2.2, §17.2.8, §17.4.4, §17.3.4).

20707 17.2 Sigmatic causative

20708 Despite the existence of periphrastic causative constructions (§24.5.1.1), the main
20709 morphosyntactic device to express causation in Japhug is the causative verbal
20710 derivation by dental or alveolo-palatal fricative prefixes, referred to as ‘sigmatic’
20711 causative in this work.

20712 17.2.1 Regular allomorphy

20713 Although not as complex as the causative derivations in Stodsde (Sun 2007a) or
20714 in Khroskyabs (Lai 2016), the sigmatic causative prefix is the derivation with the
20715 greatest number of allomorphs in Japhug.

20716 It has five regular allomorphs *sui-*, *suy-*, *z-*, *s-* and *sr-* depending on the follow-
20717 ing element, and a number of irregular ones (§17.2.2). The allomorph *sui-* occurs
20718 in most environments, and can be considered to be the default form.

20719 17.2.1.1 *z-* allomorph

20720 The *z-* allomorph appears in non-monosyllabic verb bases, when the first syllable
20721 (generally a derivational prefix, or a synchronically non-analysable prefixal
20722 element belonging to the verb root) has a sonorant initial (in practice only *mV-*,
20723 *nV-*, *yV-* or *rV-*). Table 17.1 illustrates some examples of this allomorph.

Table 17.1: Examples of the z- allomorph of the causative prefix

Nature of the prefixal element	Base verb	Derived verb
non-analyzable	<i>nuna</i> ‘rest’ <i>yurni</i> ‘be red’	<i>znuna</i> ‘stop’ <i>zyurni</i> ‘redden’
§19.7.1	<i>munmu</i> ‘move’	<i>zmunmu</i> ‘cause to move’
denominal	<i>nyma</i> ‘do’ <i>myku</i> ‘be first’	<i>znyma</i> ‘make/let do’ <i>zmyku</i> ‘make/do first’
antipassive	<i>ryst</i> ‘write/draw things’	<i>zryst</i> ‘cause to write/draw things’, ‘draw/write with’

20724 On the other hand, monosyllabic verbs with single sonorant initials, whether
 20725 nasals, rhotics or semi-vowels, never select the z- allomorph. Monosyllabic bases
 20726 with these initials take the allomorph *sui-* (§17.2.1.4): *no* ‘drive’ and *mar* ‘smear’
 20727 have the causative forms *suno* ‘make/let drive’, ‘drive with’ and *sumar* ‘make/let
 20728 smear’, not †*zno* and †*zmar*. The same constraint on monosyllabicity is observed
 20729 with the regular s- allomorph (§17.2.1.2), but does not apply to the irregular vowel-
 20730 less allomorphs of the causative (č- §17.2.2.3, z- §17.2.2.4, and j- §17.2.2.5).

20731 Intransitive bases with nasal (except ȳ-), rhotic and semi-vowel initial consonants
 20732 select the *suy-* allomorph, as illustrated by *jy* ‘finish’, *ru* ‘look at’ and *no*
 20733 ‘be prepared’, whose sigmatic causative forms are *suyjy* ‘finish’, *suyru* ‘make/let
 20734 look at’ and *suyno* ‘prepare’, respectively.

20735 In the case of intransitive verbs with the velar sonorant ȳ-, the allomorph *sui-*
 20736 occurs. For instance, *yi* ‘come’ has the causative form *suye* ‘invite’ (with irregular
 20737 ablaut, §17.2.2.7).

20738 Causative verbs with the z- allomorph in irregular contexts are discussed in
 20739 §17.2.2.7.

20740 17.2.1.2 s- allomorph

20741 The s- allomorph is only found with base verbs whose first syllable is *qa-* (Ta-
 20742 ble 17.2). All of these verbs are intransitive; it is unclear whether this *qa-* element
 20743 is analyzable as a prefix historically.

20744 Monosyllabic verbs with initial *q-* always select the *sui-* allomorph. For exam-
 20745 ple, the causative of *qaꝑ* ‘peel’ is *suiqaꝑ* ‘make peel’, not †*sqꝑ*.

Table 17.2: Examples of the *s-* allomorph of the causative prefix

Base verb	Derived verb
<i>qanu</i> ‘dark’	<i>sqanu</i> ‘put in darkness’
<i>qapuu</i> ‘be fallow’ (of a field)	<i>sqapuu</i> ‘leave fallow’
<i>qarndum</i> ‘be murky’	<i>sqarndum</i> ‘make murky’

20746 17.2.1.3 Vowel fusion

20747 With verbs whose stem begins in *a-* (contracting verbs, §12.3), the sigmatic cau-
 20748 sative prefix merges with this vowel as *sə-*, as shown in Table 17.3. In the glosses,
 20749 this vowel merger is represented as *su-*-*ə-*, following the orthographic rules in
 20750 (§12.3). Only one contracting verb has an irregular causative with intrusive *-y-*
 20751 (§17.2.2.6).

Table 17.3: The *sə-* allomorph of the causative prefix

Base verb	Derived verb
<i>ačqʰe</i> ‘cough’	<i>səčqʰe</i> ‘cause to cough’
<i>ajtu</i> ‘accumulate’ (vi)	<i>səjtu</i> ‘accumulate’ (vt)
<i>amŋʷm</i> ‘be homogeneous’	<i>səmŋʷm</i> ‘do homogeneously’

20752 There are two irregular causative verbs in *sə-*, whose base verb is not a con-
 20753 tracting verb (§17.2.2.7).

20754 17.2.1.4 *suy-* allomorph

20755 For all other types of verb stem, the choice between the *su-* and *suy-/sux-* allo-
 20756 morphs depends on both phonology and morphology. The *suy-/sux-* allomorphs
 20757 occur when the base verb is intransitive, monosyllabic, has no initial cluster and
 20758 no velar or uvular initial consonant, while *su-* appears in all other cases, in par-
 20759 ticular in all bases with consonant clusters.

20760 With the intransitive verb *baš* ‘hatch’ (the only verb with the single *b-* onset),
 20761 some speakers (such as Tshendzin) select the *suy-* allomorph and use the cau-
 20762 sative form *suybaš* ‘cause to hatch’ (1) with an internal /-yb-/ cluster (§4.2.3.1),
 20763 while other speakers select the *su-* allomorph.

- 20764 (1) *tcendyre numuu ky-yuit-a* *tce tce nur-nuu-suy-bab-a*
 LNK DEM AOR:EAST-bring-1SG LNK LNK AOR-AUTO-CAUS-hatch-1SG
 20765 ‘I brought (the eggs) and made them hatch by myself (without a hen).’
 20766 (150819 kumpGa, 47)

20767 Table 17.4 illustrates the correlation between the *suu-* / *suy-*/ *sux-* contrast and
 20768 transitivity. The intrusive -y- element undergoes regressive voice assimilation to
 20769 -x- when the initial of the verb root is unvoiced.

Table 17.4: The *suu-* and *suy-*/ *sux-* allomorphs of the sigmatic causative prefix

Transitivity	Base verb	Derived verb
intr.	<i>mbuz</i> ‘overflow’	<i>suymbuz</i> ‘let overflow’
tr.	<i>mbi</i> ‘give’	<i>sumbi</i> ‘make/let give’, ‘give with’
intr.	<i>ce</i> ‘go’	<i>suxce</i> ‘send’
tr.	<i>çum</i> ‘brood’	<i>sucum</i> ‘make/let brood’
intr.	<i>tso</i> ‘understand’	<i>suxtso</i> ‘make understand’
tr.	<i>tsum</i> ‘take away’	<i>sutsum</i> ‘send with’
intr.	<i>ndzur</i> ‘stand’	<i>suyndzur</i> ‘make/let stand up’
tr.	<i>ndza</i> ‘eat’	<i>sundza</i> ‘make/let eat’
intr.	<i>nryz</i> ‘dare’	<i>suynryz</i> ‘cause to dare’
tr.	<i>no</i> ‘drive’	<i>suno</i> ‘make/let drive’, ‘drive with’

20770 The intrusive -y- also appears in one of the irregular allomorphs of the sigmatic
 20771 causative (§17.2.2).

20772 Other derivational prefixes, including the velar causative *yṛ-* (§17.4.2), the ap-
 20773 plicative *nu-* (§17.4.2), the tropative *ny-* (§17.5.1), the proprietive *sr-* (§18.8.1) and
 20774 some denominal derivations (§20.3.2), present an allomorphy involving the inser-
 20775 tion of the -y- element, originally in the same context as that of the *suy-* allomorph
 20776 of the sigmatic causative. However, in the case of the proprietive and tropative
 20777 derivation, this -y- insertion has ceased to be productive.

20778 17.2.2 Irregular allomorphs

20779 In addition to the regular allomorphs described in the previous section, the sig-
 20780 matic causative has five irregular allomorphs with alveolo-palatal or palatal con-

20781 sonants instead of alveolar fricatives: *çuu-*, *çuy-*, *ç-*, *z-* and *j-*. All known examples
20782 are presented in Table 17.5.

Table 17.5: The irregular allomorphs of the causative prefix

Base verb	Derived verb
<i>fka</i> ‘be full’	<i>çuufka</i> ‘cause to be full’
<i>fkaβ</i> ‘cover’	<i>çuufkaβ</i> ‘cover with’
<i>mbyom</i> ‘be in a hurry’	<i>çumbyom</i> ‘cause to be in a hurry’
<i>mnrm</i> ‘smell’	<i>çumnm̩m</i> ‘cause to have a smell’
<i>m̩ym</i> ‘hurt’ (of a body part)	<i>çumnyym</i> ‘hurt’ (vt)
<i>ntaβ</i> ‘be stable’	<i>çuentaβ</i> ‘leave’ (there)
<i>n̩go</i> ‘sick’	<i>çuango</i> ‘make sick’
<i>n̩jo</i> ‘lose’	<i>çuunjø</i> ‘win’
<i>nqoꝝ</i> ‘hang’ (vi)	<i>çuunqoꝝ</i> ‘hang’ (vt)
<i>r̩yo</i> ‘borrow’	<i>çuuryø</i> ‘lend’
<i>tx-mbru + n̩gu</i> ‘be angry’	<i>tx-mbru + çuunyø</i> ‘anger’ (vt)
<i>n̩gu</i> ‘lie down’	<i>çuurnyø</i> ‘make/let lie down’
<i>rga</i> ‘be happy’	<i>çuurga</i> ‘please’ (vt)
<i>mu</i> ‘be afraid’	<i>çuiymu</i> ‘frighten’
<i>p̩yo</i> ‘flee’	<i>çp̩yo</i> ‘flee with’
<i>luy</i> ‘get loose’	<i>çluuy</i> ‘drop’
<i>nqoꝝ</i> ‘hang’ (vi)	<i>zNGOꝝ</i> ‘hang’ (on a hook)
<i>n̩ga</i> ‘wear’	<i>zŋga</i> ‘help to wear’
<i>mbri</i> ‘cry’	<i>zmbri</i> ‘play’ (an instrument)
<i>ts̩i</i> ‘drink’	<i>jts̩i</i> ‘give to drink’

20783 17.2.2.1 *çuu-* allomorph

20784 The *çuu-* allomorph is the most common of all alveolo-palatal allomorphs. It occurs on verb bases with initial clusters with nasal, *f-* or *r-* preinitials, contexts
20785 where the regular *suu-* allomorph would be expected (§17.2.1.4). The only clusterless verb root which selects the *çuu-* allomorph is the orphan verb *n̩gu* in the
20786 complex predicate *tx-mbru + n̩gu* ‘be angry’ (§22.4.3.2).

20787 The *çuu-* allomorph derives causatives mainly from intransitive verbs, except
20788 for *r̩yo* ‘borrow’ (with the inversive causative *çuuryø* ‘lend’, §17.2.5.7) and *fkaβ*
20789 ‘cover’ (which has the instrumental causative *çuufkaβ* ‘cover with’, §17.2.5.8).

The base verb *nqor* ‘hang’ has three causative forms, *cuu-nqor* (for the most common meaning corresponding to transitive ‘hang’), *z-nqor* (with a more restricted meaning, §17.2.2.4) and the regular *sui-nqor* for instrumental ('hang with') or indirect causation.

17.2.2.2 *cuuy-* allomorph

The verb *mu* ‘be afraid’ has the causative *cuymu* ‘frighten’, the only example of the *cuuy-* allomorph of the sigmatic causative. The intrusive *-y*- is expected since the base verb is intransitive and has a labial initial consonant with no cluster (§17.2.1.4), and appears in other derivations such as applicative (*nuymu* ‘be afraid of’, §17.4.2) and proprietive (*sryymu* ‘be frightening’, §18.8.1).

17.2.2.3 *c-* allomorph

The *c-* allomorph is one of the three irregular vowel-less allomorphs of the causative. It occurs on two monosyllabic verbs, *cpʰyo* ‘flee with’¹ (from *pʰyo* ‘flee’) and *cluy* ‘drop’ (from *luy* ‘get loose’), unlike the vowel-less regular allomorphs *z-* and *s-* which are never found on monosyllabic bases (§17.2.1.1, §17.2.1.2). The contrast between *c-* and *z-* is not determined by the voicing of the initial consonant of the base verb (since *luy* ‘get loose’ has a sonorant initial *l*-). Rather, *z-* exclusively occurs with voiced prenasalized obstruents (§17.2.2.4), and *j-* derives from *c-* by a recent sound change (§17.2.2.5).

Like other irregular allomorphs, *c-* is not restricted to one particular sub-function of the sigmatic causative. The verb *cpʰyo* ‘flee with’, ‘help X flee with oneself’ reflects the adjuitative function of causative (§17.2.5.3), indexing as direct object the entity helped by the subject, as shown by the 3SG→2PL configuration in (2).

- (2) *numuu ur-pʰe “wortcʰi” tx-ti-nuu tce numuu kuu*
DEM 3SG.POSS-DAT please IMP-say-PL LNK DEM ERG
a-jx-túu-wy-c-pʰyo-nuu ma,
IRR-PFV-2-INV-CAUS-flee-PL LNK
‘Say ‘please’ to him, and he will help you flee (from here).’ (Norbzang
2012, 74-75)

On the other hand, *cluy* ‘drop’ generally expresses non-volitional causation, especially when used with the autive prefix as in (3) (see also 23 in §17.2.4) but even without it (4).

¹An alternative form *cupʰyo* with the *cuu-* allomorph is also attested.

- 20822 (3) *w-xəxt tur~tu zo to-yycqali ri tce*
 3SG.POSS-strength TOTAL~exist:FACT EMPH IFR-shout LNK LNK
- 20823 *w-kur w-ŋgu qandze nu*
 3SG.POSS-mouth 3SG.POSS-in earthworm DEM
- 20824 *pjx-nuu-c-luy tce w-zda ra kuu*
 IFR:DOWN-AUTO-CAUS-get.loose LNK 3SG.POSS-companion PL ERG
- 20825 *jo-nur-tsum-nuu*
 IFR-AUTO-take.away-PL
- 20826 '(The crow) shouted with all his strength, dropped the earthworm that
 20827 was in its mouth, and its companion took it.' (2011-10-qajdo, 98-100)

- 20828 (4) *kupa-skrt to-c-luy-a*
 Chinese-language IFR-CAUS-get.loose-1SG
 20829 'I spoke Chinese by mistake.' ('I should have spoken Japhug') (heard in
 20830 context)

20831 The regular causative of *luy* 'get loose' is *suy-luy* (§17.2.1.4), and is used to
 20832 express a volitional causation 'untie, detach, take off', as in (5). The *luy* 'get loose'
 20833 itself cannot express a volitional action; this meaning is provided by the reflexive-
 20834 causative *z̥y̥-suy-luy* 'detach oneself' (§18.3.4.1).

- 20835 (5) *t̥yrbaŋkei nuu kuu nura w-combri ra pjx-suy-luy*
 hunting.dog DEM ERG DEM.PL 3SG.POSS-chain PL IFR-CAUS-get.loose
 20836 'The hunting dog took off its chains.' (140426 liegou he zhonggo-zh, 10)

20837 17.2.2.4 *z̥-* allomorph

20838 The *z̥-* allomorph of the causative is only attested with verb bases having pre-
 20839 nasalized onsets. In each of the three verbs, the meaning of the prefix is slightly
 20840 different.

20841 The causative *z̥mbri* 'play' (an instrument), 'make noise with' from the intransitive
 20842 *mbri* 'cry', 'make noise', is a plain instrumental causative (§17.2.5.8), which
 20843 selects as object the musical instrument (see for instance 5a, §8.1.3), while *z̥ŋga*
 20844 'help wearing', 'make/force to wear' (from the transitive *ŋga* 'wear') reflects the
 20845 adjuitative (§17.2.5.3) function rather than the instrumental one, since it selects
 20846 as object the person wearing the clothes (the 3DU object indexation in 6), while
 20847 the clothes are a semi-object (*t̥u-ŋga nura w-mbe t̥u-kui-ngras nura* 'old and torn
 20848 clothes', without ergative marking).

- 20849 (6) *[tui-ŋga nuara ui-mbe t^hui-kui-ngrab*
 INDEF.POSS-clothes DEM:PL 3SG.POSS-old.one AOR-SBJ:PCP-ACAUS:damage
 20850 *nuara] tū-wy-ž-ŋga-ndzi,*
 DEM:PL IPFV-INV-CAUS-wear-DU
 20851 ‘(Their_i stepmother was evil), and made the two of them_i wear old and
 20852 torn clothes.’ (140429 jiedi-zh, 12)

20853 The causative *zNGOB* from *nqoB* ‘hang’ (vi) presents an irregular voicing of the
 20854 onset, possibly the effect of a phonotactic constraint against clusters comprising
 20855 a preinitial fricative with a unvoiced prenasalized obstruent such as *cNq-, since
 20856 only *voiced* prenasalized obstruents are monophonemic (§3.2.1).

20857 The meaning of *zNGOB* is not completely predictable from that of the base verb
 20858 *nqoB* ‘hang’. Although it can be translated as transitive ‘hang’ like the other ir-
 20859 regular causative *cunqoB* ‘hang’ (§17.2.2.1), its more common meaning is ‘pull
 20860 threads (that are coiled around one’s fingers) apart (as part of the weaving pro-
 20861 cess)’ (in Chinese 牵线 <qīānxiàn> ‘pull the threads’), as in (7).

- 20862 (7) *a-tx-ri kY-zNGOB*
 1SG.POSS-INDEF.POSS-thread IMP-hang
 20863 ‘Pull the threads for me.’ (elicited)

20864 With an additional causative prefix (§17.2.7) in instrumental function (§17.2.5.8),
 20865 it specifically means ‘hang on a hook’ as in (8).

- 20866 (8) *txjŋob kui tui-ŋga ko-siu-zNGOB*
 hook ERG INDEF.POSS-clothes IFR-CAUS-hang
 20867 ‘He hung the clothes on the hook.’ (elicited)

20868 17.2.2.5 *j*- allomorph

20869 In the Kamnyu dialect of Japhug, the verb *ts^hi* ‘drink’ has the irregular causative
 20870 form *jts^hi* ‘give to drink’ with the *j*- allomorph. In dialects of Japhug which have
 20871 not undergone the *t^hi* → *ts^hi* sound change, the base verb is *t^hi* and its causative
 20872 *cts^hi* with the *c*- allomorph (§17.2.2.3). This suggests that a sound change *cts^h →
 20873 *jts^h* took place in this word by dissimilation of mode of articulation (§4.2.1.5).

20874 The causative *jts^hi* ‘give to drink’ is highly lexicalized, and can occur as input
 20875 for other derivations such as antipassive (§17.2.8, §18.6.4). The regular causative
 20876 *sui-ts^hi* can be used with a neutral factitive meaning ‘make drink’ (9) or in the
 20877 instrumental function ‘drink with/using’ (§17.2.5.8).

- 20878 (9) *qajusmynba* [...] *tce numuu tx-fka* *q^he, tce pjur-xtrr.* [...] *tce numuu*
 leech LNK DEM AOR-be.full LNK LNK IPFV-fall LNK DEM
 20879 *wi-q^hu* *q^he, nuu ky-sui-ts^hi* *máuj-k^huu.*
 3SG.POSS-after LNK DEM INF-CAUS-drink NEG:SENS-be.possible
 20880 ‘After it_i has had its fill, the leech_i (detaches and) falls down. After that, it
 20881 is not possible to make it_i drink (blood).’ (28-kWpAz, 147)

20882 17.2.2.6 Irregular vowel fusion

20883 Tthe causative verb *suxce* ‘send’ (from *ce* ‘go’) has a stem II form *syyri* derived
 20884 from the stem II *ari* of its base verb (§12.2.1). This stem II appears to present the
 20885 merger of the *suy-* allomorph with the *a-* prefixal element as *syy-*, with preserva-
 20886 tion of the *-y-* element, instead of expected †*syyri*.

20887 17.2.2.7 Other irregularities

20888 The denominal verb *symbru* ‘get angry’ (§20.3.1) has a causative form *syzmbru*
 20889 ‘make angry’ (10) with the *z-* allomorph (§17.2.1.1) infixated rather than prefixed
 20890 (occurring between the denominal *sy-* prefix and the nominal root *-mbru*).

- 20891 (10) *nuu mas kui ty-ta-sy<z>mbru tu ú-ŋu*
 DEM not.be:FACT ERG AOR-1→2-<CAUS> exist:FACT QU-be:FACT
 20892 ‘Otherwise, is it the case that I/we have made you angry?’ (2005
 20893 tAwakWcqraR, 88)

20894 The verb *zbraš* ‘attach together’ (11 provides a definition of this verb) is pos-
 20895 sibly an instrumental causative form of *braš* ‘attach’, with irregular placement
 20896 of the vowel-less allomorph *z-* (§17.2.1.1) on a monosyllabic stem and fortition of
 20897 the *β-* to /b/ to avoid the impossible cluster †*zβr-*.

- 20898 (11) *wi-p^honjbu c^hony si, txjtsi numuara tui-tui-xtcyr*
 3SG.POSS-body COMIT tree pillar DEM:PL SIMULT-NMLZ:ACTION-attach
 20899 *ku-ky-βzu numuu tce, ky-zbraš tu-kui-ti ñu.*
 IPFV-INF-make DEM LNK INF-attach IPFV-GENR-say be:FACT
 20900 ‘(Whether a person or whatever), attaching his body together with a tree
 20901 or a pillar is called *zbraš*.’ (150902 kAxtCAr, 14)

20902 The *sy-* allomorph (§17.2.1.3) is found on two bases with contracting *a-*: *pe* ‘be
 20903 good’ and *rmi* ‘be called’, whose corresponding causative forms are *sype* ‘do well’

20904 and *syrmi* ‘name someone’ (§14.4.4), respectively. In the case of *syrmi*, this irreg-
 20905 ularity is a clue that it is in fact a denominal verb derived from the noun *tx-rmi*
 20906 ‘name’ by the causative denominal (§20.10.3), rather than a causative directly
 20907 derived from the intransitive verb *rmi* ‘be called’.

20908 The causative verb *suye* ‘invite’ from *yi* ‘come’ has the expected allomorph *su-*,
 20909 but presents ablaut (*yi* → *ye*) with the same vowel alternation as that of stem II
 20910 (§12.2.1.1). This is a trace of a vowel alternation system which used to be more
 20911 widespread, and is better preserved in Zbu (Gong 2018) and some varieties of Situ
 20912 (Zhang 2018: 304, fn 10).

20913 17.2.2.8 *a-/z-* alternation

20914 Verbs whose stem has three or more syllables, whose initial syllable is *a-* followed
 20915 by a prefixal syllable with a sonorant initial such as *yu/yə-* or *ru/rə-*, have sig-
 20916 matic causative forms with deletion of the *a-* element rather than regular vowel
 20917 fusion (§17.2.1.3). For instance, the causative of *arvts^{hi}* ‘be cooked like rice gruel’
 20918 is *zrvts^{hi}* ‘cook like rice gruel’ instead of expected *†syrvts^{hi}*.

20919 Other pairs of the same type include *ayururu* ‘that can be done at the same
 20920 time as’ / *zyururu* ‘do at the same time as’, *arvtç^{ha}* ‘be determined from’ / *zrvtç^{ha}*
 20921 ‘determine from’ (see examples 31 and 32, §24.2.4) and *ayun^jgunggu* ‘having a lot
 20922 of layers’ / *zyun^jgunggu* ‘put on a lot of layers’.

20923 Some of the verbs with this *a/z-* alternation are transparently denominal verbs
 20924 with the compound prefixes *arv-* (§20.2.3) and *ayu-* (§20.2.4.2).

20925 17.2.3 Lexicalized sigmatic causatives

20926 Some causative verbs are formally regular, but their semantic relationship with
 20927 the base verb is not completely predictable.

20928 The causative *z-nuna* of the intransitive verb *nuna* ‘rest’ has the predictable
 20929 meaning ‘let rest’ as in (12), but more commonly appears as a complement-taking
 20930 verb meaning ‘stop’ as in (13) (see also 163, §8.2.11).

- 20931 (12) *nx-pi ni kuu “nuna-j nx nuna-j” zo*
 20932 *2SG.POSS-elder.sibling DU ERG rest:FACT-1PL ADD rest:FACT-1PL EMPH*
kxtupa-ndzi ri, maka zo ky-z-nuna a-mx-tx-tuu-k^hwi ma,
say:FACT-DU LNK at.all EMPH INF-CAUS-REST IRR-NEG-PFV-2-agree LNK
 20933 ‘Your two brothers will repeatedly say ‘let us rest’, but you should never
 20934 agree to let them rest.’ (2003 qachga, 131-1322)

- 20935 (13) *wi-pi kur jo-yi tce, tur-ci ky-car*
 3SG.POSS-elder.sibling ERG IFR-come LNK INDEF.POSS-water inf-search
 20936 *to-z-nuna tce*
 IFR-stop LNK
 20937 'His brother came and stopped looking for water.' (2002 nyimawodzer, 66)

20938 The form *suqas*, which is analyzable as the causative of the transitive verb *qas*
 20939 'peel', has the unexpected meaning 'delimit the boundaries of (a place)' (14). The
 20940 semantic change is unexplained.

- 20941 (14) *k^ha wi-sta ty-nui-suiqas-a*
 house 3SG.POSS-place AOR-AUTO-delimit-1SG
 20942 'I delimited the site (to build) the house.' (elicited)

20943 The secundative verb *nusuk^ho* 'rob, extort', is the lexicalized autive (§19.1.6) of
 20944 the causative *suk^ho* 'cause to give' of the indirective verb *k^ho* 'give' (§14.4.1).² The
 20945 original meaning of *nusuk^ho* was presumably 'X causes Y to give Z to himself_i',
 20946 its grammatical subject being thus originally both agent (causer) and recipient at
 20947 the same time, reflecting the inversive function of the causative (§14.4.3, §17.2.5.7).

20948 The transitive subject, object and dative arguments of *k^ho* correspond to the
 20949 object, semi-object and subject of *nusuk^ho*, respectively. Example (15) shows this
 20950 verb with 2→1SG indexation, with a meaning that can still be interpreted as 'you
 20951 cause me to give it to you'.

- 20952 (15) *nui mykufts^hi pur-kui-nusuk^ho-a puu~puu-cti q^he,*
 DEM forcing IPFV-2→1-extort-1SG COND~PST.IPFV-be.AFF LNK
 20953 *kuuki azo sylanphyn ki pju-qri-a nyu*
 DEM.PROX 1SG basin DEM.PROX IPFV-break[III]-1SG be:FACT
 20954 'If you (try) to take it from me forcibly, I will break this basin.' (150831
 20955 jubaopen-zh, 105-106)

20956 The causative derivation from *k^ho* to *nusuk^ho* differs from other inversive cau-
 20957 satives in the obligatory presence of the autive *nui-*, and the additional coercive
 20958 meaning.

20959 The verb *nusuk^ho* can serve as input for other derivations (§18.6.9). The autive
 20960 prefix *nui-* in this verb, although lexicalized, can be optionally reordered with
 20961 regard to the antipassive prefix (§18.6.9, §19.1.6).

²This derivation dates back to the common ancestor of Northern Gyalrong languages, as shown by the Tshobdun cognate *nsək^hi* 'snatch away' (Sun & Blogros 2019: 220).

The verb *sufsts^{hi}*, formally the causative of the stative verb *fts^{hi}* ‘feel better’ (or ‘be good for nothing’), only occurs in negative form (§13.1.3) and means ‘force, coerce’ as in (16).

- (16) *tceri tycime nuu kuu, tce uu-wa nuu kuu mur-tó-wy-sufsts^{hi}*
 but girl DEM ERG LNK 3SG.POSS-father DEM ERG NEG-IFR-INV-force
q^he, nuunu cuŋŋwa uu-sŋi t^huat^hyci puu-kuu-fse
 LNK DEM before 3SG.POSS-day something PST.IPFV-SBJ:PCP-be.like
nunura uu-wa uu-tuu-fcxt pŋy-βzu
 DEM:PL 3SG.POSS-father 3SG.POSS-NMLZ:ACTION-tell IFR-make
 ‘The girl, pressed by her father, told her father everything that had
 happened in the day before that.’ (140429 qingwa wangzi-zh, 110)

This meaning presumably derives from ‘cause to be unable to stand/bear’, as the base verb *fts^{hi}* in negative form can have the meaning ‘cannot stand (the pain, discomfort caused by a disease’ as in (17).

- (17) *wuma zo puu-mŋym tcendyre muu-c^hy-fts^{hi} tce pŋy-γi*
 really EMPH SENS-hurt LNK NEG-IFR-feel.better LNK IFR:DOWN-come
tce
 LNK
 ‘It hurt a lot, she could not stand it and came (down to Mbarkham for
 treatment).’ (12-BzaNsa, 102-103)

The related adverb *mykufts^{hi}* ‘forcibly’, which originates from the negative stative infinitive of *fts^{hi}* (§16.2.1.8), is also used to express coercion (§17.2.5.2).

17.2.4 Morphosyntax

17.2.4.1 Intransitive bases

The causative derivation increases the valency of the base verb by one argument. In the case of intransitive bases, the resulting verb is monotransitive. The intransitive subject of the base verb corresponds to the object of the causative verb. For instance, in (19) the causative verb *synbaꝝ* ‘hide’ (vt) (from the intransitive *anbaꝝ* ‘hide’ (vi), 18) takes the portmanteau prefix 1→2 *ta-* (§14.3.2.3), indexing the person hiding as object, and the causer (the person helping him/her, §17.2.5.3) as transitive subject.

- (18) *kx-anbaꝝ-a*
 AOR-hide-1SG
 ‘I hid.’ (elicited)

- 20990 (19) *a-rfit* *ra nuu-yi-nuu* *cti* *tctet^ha, ky-ndza kowa*
 1SG.POSS-child PL VERT-come:FACT-PL be.AFF:FACT later INF-eat manner
 20991 *tú-wy-βzu* *cti* *tce ku-ta-sui-ynbaš* *ŋu*
 2-INV-make:FACT be.AFF:FACT LNK IPFV-1→2-CAUS-hide be:FACT
 20992 ‘My children are about to come back and will try to eat you, I have to
 20993 hide you (help you hide).’ (Norbzang 2012, 300-301)

20994 The causer of causative verbs derived from intransitive bases is morphosyntactically identical to the subject of a monotransitive verb both from the point of view of indexation and case marking, and takes ergative when overt as in (20).

- 20997 (20) *tx-mu* *nua kua tx-pytso* *ra k^hri ui-pa* *zua*
 20998 INDEF.POSS-mother DEM ERG INDEF.POSS-child PL bed 3SG.POSS-under LOC
 20999 *ko-sui-ynbaš*
 IFR-CAUS-hide
 ‘The old woman hid the children under the bed.’ (elicited)

21000 17.2.4.2 Transitive bases

21001 The causativization of monotransitive verbs³ is more complicated. While the
 21002 causer is always treated like a transitive subject in terms of indexation, ergative
 21003 marking and relativization (§14.4.3), the status of the causee (corresponding
 21004 to the transitive subject of the base verb) and of the patientive argument (object
 21005 of the base verbs) are less straightforward.

21006 From the point of view of indexation (§14.4.3), both causees (21) and patientive
 21007 arguments (22) can be indexed as direct objects (in these examples with 2→1SG
 21008 configurations, §14.3.2.3).

- 21009 (21) *χpi pjui-fcat-a, pjui-kua-sui-fcat-a-ndzi nua bo*
 21010 story IPFV-tell-1SG IPFV-2→1-CAUS-tell-1SG-DU DEM TOP.ADVERS
 21011 *jxy*
 21012 be.acceptable:FACT
 ‘I can tell a story_i, the two of you can have me tell it_i, but ...’ (140511 1001
 yinzi-zh, 49)

21013 The form *tx-kua-sui-ndu-a* is ambiguous, and can either be interpreted as ‘you
 21014 caused me to be beaten (by him/someone)’ as in (22), but also as ‘you made me
 21015 beat him’ with the 2SG as causee rather than patientive argument.

³The causativization of semi-transitive and ditransitive verbs is discussed in §14.4.4 and §14.4.3, and is not repeated here.

- 21016 (22) *tabndo máj-tur-tso tce, tce li ty-kur-su-bndur-a*
 speech NEG:SENS-2-understand LNK LNK again AOR-2→1-CAUS-hit-1SG
 21017 ‘You are not listening (to what I say), you caused me to be beaten again.’
 21018 (2003-kWBRa, 109)

21019 The indexation of these verbs is determined by a person hierarchy: when the
 21020 causee (or patientive) is first/second person, and the patientive (or causee) is third
 21021 person, the causative verb takes first/second object indexation (§14.4.3).

21022 From the point of view of case marking, patientive arguments never take the
 21023 ergative, while causees can take it optionally (§8.2.2.6). In example (23), the first
 21024 causee *crypya* ‘bird sp.’ in left-dislocated position has no ergative marking, while
 21025 the second one *qajdo* ‘crow’ takes it (note that the plural indexation on *pjr-su-*
 21026 *yut-nu* shows that *qajdo* is causee and not causer).

- 21027 (23) *crypya nunuu, smyn sajryz ra kuu ci pjr-su-yut-nu*
 bird.sp. DEM medicine buddha PL ERG once IFR:DOWN-CAUS-bring-PL
 21028 *tce, nuu cry uu-ku qʰe pjr-nuu-c-luy, tce*
 LNK DEM juniper 3SG.POSS-head LNK IFR:DOWN-AUTO-CAUS-get.loose LNK
 21029 *qajdo kuu ci pjr-su-yut-nu ri, nunuu ckryz uu-ku*
 crow ERG once IFR:DOWN-CAUS-bring-PL LNK DEM oak 3SG.POSS-head
 21030 *pjr-nuu-cluy,*
 IFR:DOWN-AUTO-CAUS-get.loose
 21031 ‘The buddhas_i sent the juniper bird_j to bring the medicine_k (to Gesar), but
 21032 it_j dropped it_k on a juniper tree, they_i sent a crow_l, but it_l dropped it_k on
 21033 an oak.’ (2003 gesar, 260)

21034 17.2.4.3 Semi-reflexive

21035 There are cases of semi-reflexive indexation (§14.3.2.4) with causative verbs, where
 21036 a dual or plural number marker includes both the causer and the causee, as in
 21037 (24) where in the 3'→3DU form *tó-wy-su-ndza-ndzi* the dual suffix indexes the
 21038 addition of the causer (*tr-rzaβ* ‘wife’) and the causee (her husband).

- 21039 (24) *tr-rzaβ nuu kuu icqʰa, tsʰaŋ uu-ŋguu*
 INDEF.POSS-wife DEM ERG the.aforementioned cupboard 3SG.POSS-in
 21040 *la-nuu-rku kuu-muum nuraa*
 AOR:UPSTREAM:3→3-AUTO-put.in SBJ:PCP-be.tasty DEM:PL
 21041 *cʰy-tcxt tce tó-wy-su-ndza-ndzi pjr-ra.*
 IFR:DOWNSTREAM-take.out LNK IFR-INV-CAUS-eat-DU IFR.IPFV-be.needed
 21042 ‘The wife had no choice but to take out the nice (food) that she had put in

21043 the cupboard and give it to (her husband and herself).' (150824 kelaosi-zh,
 21044 76)

21045 17.2.4.4 Negation

21046 The relative position of the negative and causative prefixes in the prefixal chain is
 21047 fixed (§11.2) and independent of the semantic scope.⁴ Thus, a negative causative
 21048 verb can be either interpreted as 'not cause to X' or as 'cause not to X' (prohibi-
 21049 tion). For instance, *mr-sux-ce-nu* (NEG-CAUS-go:FACT-PL) can either mean 'they
 21050 don't send him/them' or 'they prevent/forbid/don't let him/them go' as in (25).

- 21051 (25) *nua cymuiyduuy ky-lyt kui-mk^hyz nura ra*
 21052 DEM gun INF-release SBJ:PCP-be.expert DEM:PL be.needed:FACT
ma mx-kui-spa nura mr-sux-ce-nu.
 21053 LNK NEG-SBJ:PCP-be.able DEM:PL NEG-CAUS-go:FACT-PL
 21054 'They need people who are good at shooting with guns, they don't let
 21055 those who are not able (to shoot) go (to do the shooting).' (150829
 KAGWcAno, 14)

21056 The negative verb form *muu-pa-suu-p^hut* (NEG-pfv:3→3'-CAUS-take.off) an also
 21057 either mean 'he did not make him/them destroy it' or 'he prevented him/them
 21058 from destroying it', as in (26).

- 21059 (26) *yzo uu-k^ho ta-fsraŋ numuu, [uu-pi ni*
 21060 bee 3SG.POSS-house AOR:3→3'-protect DEM 3SG.POSS-elder.sibling DU
muu-pa-suu-p^hut] ra yuu, yzo ra yuu nuu-rfylpu nuu
 21061 NEG-pfv:3→3'-CAUS-take.off PL GEN bee PL GEN 3PL.POSS-king DEM
jo-yi.
 21062 IFR-come
 21063 'The king of the bees whose hive he had protected and had prevented his
 brothers from destroying came.' (140510 fengwang-zh, 137)

21064 Another possible interpretation of the combination of causative and negative
 21065 prefixes is 'make sure X does not need to Y', 'take care of X and ensure Y does
 21066 not need to happen' (where X represents the causee and Y the base verb), as in
 21067 (27).

⁴The same is true of associated motion prefixes (§17.2.4.5).

- 21068 (27) *a-mu rcanuu ndzu tuu-ldzi cinγ*
 mother UNEXP:FOC chopsticks one-stick even
 21069 *a-my-puu-tuu-sur-qluat-nuu ra*
 IRR-NEG-PFV-2-CAUS-break-PL be.needed:FACT
 21070 ‘Make sure that my mother does not even need to break chopsticks.’ (an
 21071 idiomatic expression meaning “please take care of my mother’s every
 21072 need”, Norbzang 2012, 241)

21073 The same type of ambiguity is also found with the velar causative (§17.3.2.1).

21074 **17.2.4.5 Associated motion**

21075 As in the case of the negation (§17.2.4.4), the relative ordering of the associated
 21076 motion and causative prefixes in the template is fixed and independent of seman-
 21077 tic scope, and both ‘go/come and cause to *X*’ and ‘cause to go/come and *X*’ are
 21078 possible interpretations.

21079 Thus, either the causer or the causee can be the argument undergoing motion
 21080 (§15.2.2). For instance, the verb *c-ko-z-ruru* in (28) can either mean ‘he sent him
 21081 to guard it’ (causee motion, the correct interpretation in this context) or ‘he went
 21082 and made him guard it’ (causer motion).

- 21083 (28) *rjylpu kuu uu-tcuu stu kuu-xtci nuu c-ko-z-ruru.*
 king ERG 3SG.POSS-son most SBJ:PCP-be.small DEM TRAL-IFR-CAUS-guard
 21084 ‘The king sent his youngest son to guard (the apple trees).’ (140507
 21085 jinniao-zh, 39)

21086 **17.2.4.6 Serial verb constructions**

21087 In the serial verb construction with the similitative verb *stu* ‘do like’, the instru-
 21088 mental causative can be repeated on both verbs, as in (29).

- 21089 (29) *tce uu-jas nuu kuu tʰylwa ki*
 LNK 3SG.POSS-hand DEM ERG earth DEM.PROX
 21090 *cʰuu-sui-ste nuu uu-tʰycu*
 IPFV:DOWNSTREAM-CAUS-do.like[III] DEM 3SG.POSS-downstream
 21091 *cʰuu-sur-βde*
 IPFV:DOWNSTREAM-CAUS-throw
 21092 ‘(The mole) does like this with its forepaws, and throws the earth below.’
 21093 (28-qapar, 155-156)

21094 In other serial verb constructions (§25.4.1), intransitive stative verbs generally
 21095 have to be causativized to be used with transitive verbs to ensure transitivity
 21096 harmony. These causative verbs expressing manner can appear before the lexical
 21097 verbs as in (30) (where the causative of *m̥ku* ‘be first’ expresses the meaning ‘do
 21098 X first’, §20.6) or follow it (31, 32).

- 21099 (30) *a-ts^ha ci pui-z-m̥ke pui-rke*
 1SG.POSS-tea once IMP-CAUS-be.first[III] IMP-put.in[III]
 21100 ‘Serve me some tea first.’ (elicited)
- 21101 (31) *w-m̥ju nura koŋla zo ko-xtcyr ko-swi-yswiy*
 3SG.POSS-opening DEM:PL completely EMPH IFR-tie IFR-CAUS-be.tight
 21102 *zo.*
 EMPH
 21103 ‘He tied the opening (of the bag) very tightly.’ (150824 kelaosi,-zh 297)

21104 The irregular causative of *pe* ‘be good’, *sx-pe* (§17.2.2.7), is common in the man-
 21105 ner SVC (and in the corresponding complement clause construction, see 33 in
 21106 §17.2.4.7) to express the meaning ‘do X well’ (32).

- 21107 (32) *<luban> kuu rcanuu kuu-pui-pe zo, maka*
 ANTHR ERG UNEXP:FOC INF:STAT-EMPH~be.good EMPH at.all
 21108 *m̥y-kuu-ymta^hoŋjyr zo to-ti to-sx-pe.*
 NEG-INF:STAT-be.incomplete EMPH IFR-say IFR-CAUS-be.good
 21109 ‘Luban said (the answers) very well, without missing anything.’ (150902
 21110 luban-zh, 63)

21111 17.2.4.7 Complement clauses with sigmatic causative of manner

21112 Causative forms from adjectival stative verbs occur as complement-taking verbs
 21113 to express the manner in which the action takes place (§24.5.1.4). This causative
 21114 complement construction competes with the manner serial verb construction
 21115 (§17.2.4.6, §25.4.1) and the use of infinitive conversbs (§16.2.1.7, §25.4.2). The same
 21116 construction is found with velar causatives (§17.3.2.2).

21117 For instance in (33) the meaning ‘give a good answer’ is expressed with the
 21118 causative *sx-pe* of *pe* ‘be good’ (§17.2.2.7) and an infinitival complement clause
 21119 with the verb *k̥y-k^ho* ‘to give’.

- 21120 (33) [a-lvn ky-k^ho] u-tv-tui-sy-pe-t ny tce
 21121 1SG.POSS-answer INF-give QU-AOR-2-CAUS-be.good-PST:TR ADD LNK
 21122 ku-ta-wum ŋu
 21123 IPFV-1→2-gather be:FACT
 'If you give a good answer (to all my questions), I will take you (as my
 21122 disciple).' (150902 luban-zh, 48)

21124 With the exception of a few verbs like *sype* 'do well', most complement-taking
 21125 causative verbs select the lexicalized orientation of the verb in the complement
 21126 clause (§24.3.5). For instance, in (34), the causative verb *c^hy-su-ymnjym* has the
 21127 DOWNSTREAM orientation preverb *c^hy-* (§15.1.1) selected by the verb *yndzur* 'grind'.

- 21128 (34) ky-yndzur c^hy-su-ymnjym
 21129 INF-grind IFR:DOWNTREAM-CAUS-be.homogeneous
 'He ground (the flour) very homogeneously.' (elicited)

21130 The causative form is also required when the infinitival complement clause
 21131 contains a transitive verb with dummy subject (§14.3.5), as in (35).

- 21132 (35) paχci nui u-jwa^h ky-lvt nui-z-mvke, nui
 21133 apple DEM 3SG.POSS-leaf INF-release IPFV-CAUS-be.first[III] DEM
 21134 u-q^hu tce nui-rumuntob,
 'The apple (tree) first grows leaves, and after that blooms.' (07-paXCi, 14)

21135 17.2.4.8 Auxiliary verbs

21136 A few auxiliary verbs can take the sigmatic causative, and are used with comple-
 21137 ment clauses in a way that is different from those treated in §17.2.4.7.

21138 The causative *suxch'a* from the modal verb *c^ha* 'can' often occurs in inverse
 21139 form with a dummy subject (§14.3.5) with the specific meaning of '(cause to)
 21140 be physically able to *X*', '(cause to) be strong enough to *X*', as in example (36)
 21141 (see also §24.5.3.3). The agent is not expressed, but implicitly refers to the heavy
 21142 object in (36).

- 21143 (36) nui-rzi tce [ky-flkur] múj-tui-wy-sux-c^ha.
 21144 SENS-be.heavy LNK INF-carry.on.the.back NEG:SENS-2-INV-CAUS-can
 'It is heavy, you won't be able to carry it on your back.' (elicitation)

21145 This complement-taking verb is exceptional in being the only one in Japhug
 21146 requiring coreference between object of the matrix clause and subject of the com-
 21147 plement clause (§24.5.3.3).

21148 This verb is attested in direct forms, as in (37), but only in the meaning ‘cause
 21149 to be able to bear’ without infinitival complement.⁵

- 21150 (37) *kumpya p^hu nui jui-β^a tce, mu nura mui-pui-sux-c^he*
 21151 fowl male DEM SENS-win LNK female DEM:PL NEG-SENS-CAUS-can[III]
 21152 ‘(Otherwise) the roosters are too strong, and and the hens cannot bear it.’
 21153 (150819 kumpGa, 9)

21153 The intransitive phasal *jyy* ‘be finished’ (§24.5.6, unrelated to the modal verb
 21154 *jyy* ‘be allowed’, §24.5.3.1) has the causative form *suyjyy* ‘finish’, used as a syn-
 21155 onym of the transitive verb *st^hut* ‘finish’ (§24.5.6).

21156 Some modal verbs also appear in the same construction with a velar, instead
 21157 of a sigmatic causative (§17.3.2.3).

21158 17.2.4.9 Collocations

21159 Verbs in noun-verb collocations can undergo sigmatic causative derivation. For
 21160 instance, the combination of *tui-χpum* ‘knee’ and *ts^hor* ‘attach’ (§22.4.2.8), which
 21161 means ‘kneel’ (38), can be causativized to *tui-χpum + sui-ts^hor* ‘cause/make/force
 21162 to kneel’ (39).

- 21163 (38) *ui-χpum p^hy-ts^hor,*
 21164 3SG.POSS-knee IFR-attach
 21165 ‘He knelt down.’
- 21166 (39) *ui-rkuu nutcu nui-χpum p^hui-sui-ts^hor, tce*
 21167 3SG.POSS-side DEM:LOC 3PL.POSS-knee IPFV-CAUS-attach LNK
ui-ndzyts^hi ui-ro nui-kui-ri nuna nuna,
 21168 3SG.POSS-food 3SG.POSS-excess AOR-SBJ:PCP-remain DEM:PL
nui-βyri p^hui-χtyr tce, tu-sui-ndze p^hy-ηu.
 21169 3PL.POSS-front IPFV:DOWN-scatter LNK IPFV-CAUS-eat[III] IFR.IPFV-be
 21170 ‘(The evil prince) forced them to kneel at his side, and would throw at
 them leftovers from his food and force them to eat it.’ (150821 edu de
 wangzi-zh, 63)

⁵The base verb *c^ha* ‘can’, among other functions, is attested with the meaning ‘be fine, be all right’ (Chinese 行 <xíng> ‘be all right’), in which case it does not take any complement clause or overt semi-object.

21171 The possessive prefix on the inalienable noun *tu-χpum* ‘knee’, which is obliga-
 21172 torily coreferential with the transitive subject in the base construction (38), must
 21173 be coreferential with the causee in the causativized construction (39).

21174 Causativization of complex predicates is also possible with the velar causative
 21175 prefix (§17.3.2.4).

21176 17.2.5 Semantics of the causative

21177 The basic meaning of the sigmatic causative is a factitive ‘make X’ or ‘have some-
 21178 one/something X’.

21179 Depending on the volition of the causer and causee and the nature of the ac-
 21180 tion, several specific cases can be distinguished: missive ‘sent to’ (§17.2.5.1), co-
 21181 ercive ‘force to’ (§17.2.5.2), adjutative ‘help Xing’ (§17.2.5.3), rogative ‘ask Xing’
 21182 (§17.2.5.4), permissive ‘let, allow’ (§17.2.5.5) and indirect causation (§17.2.5.6). This
 21183 classification is intended as a convenient way of exploring the uses of the cau-
 21184 sative in Japhug, and makes no claim to reveal the instantiations of universal
 21185 categories.

21186 In addition, the sigmatic causative has extended and more grammaticalized
 21187 functions, such as inversive (§17.2.5.7), instrumental (§17.2.5.8) and tropative (§17.2.5.9),
 21188 as well as purely syntactic functions in serial verb constructions (§17.2.4.6 above)
 21189 and complementation (§17.2.4.7).

21190 17.2.5.1 Missive

21191 With motion (§15.1.2.1) and manipulation verbs (§15.1.2.2), the causative has a
 21192 missive meaning. For instance, the causative *suu-yut* from *yut* ‘bring’ means ‘send’
 21193 in the sense of ‘have someone bring X’ (either by directly asking a person or by
 21194 mail), as in (40) (see also 23 above in §17.2.4.2).

- 21195 (40) *a-ŋga lɪ-tuu-suu-yut-ndzi nuu, a-xtsa nuu wuma*
 21196 1SG.POSS-clothes AOR-2-CAUS-bring-DU DEM 1SG.POSS-shoe DEM really
 21197 *nuu-pe*
 21198 SENS-be.good
 21199 ‘The clothes that you have sent me, the shoes are very nice.’
 21200 (conversation, 15.04.18)

21199 The missive meaning of the causative is also found with non-motional bases
 21200 taking an associated motion prefix, as in (28) above (see also §17.2.4.5).

21201 17.2.5.2 Coercive

21202 The sigmatic causative also occurs to express coercive causation ‘force to’ against
 21203 the will of the causee, as in (41) (see also 39 in §17.2.4.9).

- 21204 (41) *tc^heme nuu kuujyu kuu-wxtuu~wxti zo na-suu-ta-ndzi*
 21205 girl DEM oath SBJ:PCP-EMPH~be.big EMPH AOR:3→3'-CAUS-put-DU
 21206 *nuu-jyu*
 21207 SENS-be

21208 ‘They_{DU} forced the girl to swear a big oath.’ (2003 qachga, 139)

21209 This meaning occurs in particular with the adverb *m̥ykuufsts^{hi}* ‘forcibly’ (42) (see
 21210 also 175, §16.2.1.8), and the related lexicalized causative verb *sufts^{hi}* ‘force’ (see 16,
 21211 §17.2.3).

- 21212 (42) *tx-pytso smyn m̥ykuufsts^{hi} tx-suu-ndza-t-a*
 21213 INDEF.POSS-child medicine forcibly AOR-CAUS-eat-PST:TR-1SG
 21214 ‘I forced the child to eat the medicine.’ (elicited)

21215 In this function, the causee generally does not take the ergative, as shown by
 21216 the examples above.

21217 17.2.5.3 Adjutative

21218 The adjutative meaning of the causative ‘help Xing’ occurs with verbs whose
 21219 action is in the interests of the causee, and can only be successfully performed
 21220 by collaboration between causer and causee. A typical example is the causative
 21221 *s̥y̥nbaz* ‘hide’, ‘help to hide’ from *anbaž* ‘hide’ (vi) (see 19 and 20 above, §17.2.4).

21222 Some verbs with irregular allomorphs have the adjutative function, in parti-
 21223 cular *cp^hyo* ‘flee with’ (from the intransitive *p^hyo* ‘flee’, §17.2.2.3) and *z̥yga* ‘help
 21224 wearing’ (from *yga* ‘wear’, §17.2.2.4).

21225 17.2.5.4 Rogative

21226 Rogative causation occurs when the causer asks a causee for help in performing
 21227 an action, for instance for medical treatment as in (43).

- 21228 (43) *azuy kuny tx-z-nuisman-a q^he tx-mna cti*
 21229 1SG:GEN also AOR-CAUS-treat-1SG LNK AOR-be.better be.AFF:FACT
 21230 ‘I had my own (bellyache) treated (by someone) and it got better.’
 21231 (2011-13-qala, 29)

21232 The rogative *sr-* prefix derives from this use of the causative (§18.2).

21229 17.2.5.5 Permissive

21230 The sigmatic causative occurs with a permissive interpretation ‘let/allow *X*’,
 21231 when the causer does not prevent the causee from performing an action. This
 21232 meaning of the causative is common for instance in 2→1 verb forms such as (44)
 21233 and (45).

- 21234 (44) *ku-kur-z-ryzi-a-nur* *nur-nts^{hi}*
 21235 IPFV-2→1-CAUS-stay-1SG-PL SENS-be.better
 ‘Please let me stay (here).’ (qajdoskAt 2002, 67)

- 21236 (45) *a-mu* *ny-ndzyi* *u-rc^hβ*
 21237 2SG.POSS-mother 2SG.POSS-fang 3SG.POSS-interstice
tu-kui-sui-rto&-i *ra*
 21238 IPFV-2→1-CAUS-look-1SG be.needed:FACT
 21239 ‘Mother, let us look at (show us the thing) that is in the interstice
 between your fangs?’ (Norbzang 2012, 308)

21240 Additional examples of permissive causatives include for instance *z-nuna* ‘al-
 21241 low to rest’ (§12, §17.2.3) and *sui-ndza* ‘let eat, give to eat’ (24, §17.2.4).

21242 17.2.5.6 Indirect causation

21243 The sigmatic causative can be used to express the unintended result of an (erro-
 21244 neous) action on the part of the causer, as in (46) (see also 22, §17.2.4).

- 21245 (46) *nyzo tx-ndze* *ma alo* *ma-ly-tui-tsum* *ma*
 21246 2SG IMP-eat[III] LNK upstream NEG-IMP:UPSTREAM-2-take.away LNK
t^ha li kui-sui-ndui-a
 21247 later again 2→1-CAUS-hit-1SG
 21248 ‘Eat it, don’t take it up there, you would cause me to be beaten again.’
 (2003-kWBRa, 71-72)

21249 It can even be used to express a detrimental result for the causer due to his
 21250 negligence and failure to take proper preventive measures (47).

- 21251 (47) *kum mu-c^hui-pe* *q^he* ... *kum ku-njuw* *nur-βde* *q^he*
 21252 door NEG-IPFV-close LNK door SBJ:PCP-ACAUS:open IPFV-leave LNK
laχtc^ha ra tu-z-murki
 21253 thing PL IPFV-CAUS-steal[III]
 21254 ‘(Due to being a heavy drinker), he would (forget) to close the door, leave

21254 it open, and (as a result) have his things stolen (by other people).'
 21255 (17-lhazgron, 72-73)

21256 It also occurs when the causer only suggests that the causee undertake an
 21257 action of his own volition, with unexpected consequences for the causee. In (48),
 21258 the causative on *nu-tu-suu-pʰut* ‘you had it taken off’ refers to the fact that the
 21259 causer (a trickster rabbit from a traditional story) cheated the referent in 1SG (a
 21260 fierce bear) by suggesting that he treat his belly ache in such a way that he would
 21261 wound his own bottom. Note that the absence of 2→1 indexation on the verb *nu-*
 21262 *tu-suu-pʰut* means that the bear does not regard himself as causee, and expresses
 21263 it as if the wound resulted from an event independent of him.

- 21264 (48) *pjx-kuu-nuiβlu-a tce mx-jyγ ma tce a-xtu*
 IFR-2→1-cheat-1SG LNK NEG-be.allowed:FACT LNK LNK 1SG.POSS-belly

21265 *kuu-mna syzny a-mpʰuz u-ntcʰur*
 INF:STAT-be.better COMP 1SG.POSS-buttock 3SG.POSS-piece
nui-tu-suu-pʰut tce

21266 AOR-2-CAUS-take.off LNK

21267 ‘You cheated me, it is outrageous, not only did my belly not get better, but
 21268 (by misleading me) you caused a piece of my buttocks to be ripped off.’
 21269 (2011-13-qala, 15)

21270 The causative can also express an event resulting not from an action, but from
 21271 the absence of action on the causer’s part, with unintended consequences for
 21272 the patientive argument. For instance, in (49), the 2SG causer (a bird) is about to
 21273 (unwillingly) cause the 1SG (patientive argument) to be killed by not appearing
 21274 to the king.

- 21275 (49) *nua mab ny, müj-tu-yi tce kui-suu-sat-a*
 DEM not.be:FACT ADD NEG:SENS-2-come LNK 2→1-CAUS-kill:FACT-1SG

21276 *nua-ŋu*
 SENS-be

21277 ‘Otherwise, by not coming, you are about to get me killed.’ (2005
 21278 Kunbzang, 315)

21279 In (50), the causative expresses a non-expected result due to the negligence of
 21280 the causer.

- 21281 (50) *tx-mtʰum jy-z-ydi-t-a*
 INDEF.POSS-meat IFR-CAUS-have.a.stench-PST:TR-1SG
 21282 ‘I let the meat spoil.’ (elicited)

21283 17.2.5.7 Inversive

21284 The inversive function of the causative occurs with verbs expressing a transfer
 21285 of property, reversing the recipient/source relation of the base verb. Two possi-
 21286 ble cases exist, depending on how source and recipient are encoded by the base
 21287 verb's argument structure.

21288 First, most inversive causatives are recipient-source inversive: the argument
 21289 with oblique case of the base verb (the source of the transfer) corresponds to the
 21290 causer of the causative verb, and the subject of the base verb (the recipient of the
 21291 transfer) to the causee of the causative verb (indexed as direct object) (see §14.4.3
 21292 for a more detailed discussion). Examples of goal inversives include the irregular
 21293 *çurjo* 'lend' (§17.2.2.1) from *rjo* 'borrow' and *znynguu* 'lend' from *nnynguu* 'borrow'
 21294 (see §14.4.1 on the semantic difference between *nnynguu* and *rjo* 'borrow').

21295 Second, the highly lexicalized *nusuk^ho* 'rob, extort' from *k^ho* 'give' is a source-
 21296 recipient inversive: the dative argument of the base verb (recipient) corresponds
 21297 to the transitive subject (causer/recipient) of the causative verb, and the subject
 21298 of the base verb to the direct object (source) of the causative verb (§17.2.3). For
 21299 other secundative verbs, the rogative *sy-* derivation is used instead to express
 21300 source-recipient inversion (§18.2).

21301 Although inversive causative mostly occurs with ditransitive bases, the causa-
 21302 tive of the monotransitive verb *χtu* 'buy' can also be interpreted as a recipient-
 21303 source inversive. Although *χtu* 'buy' lacks a dative argument, the source can be
 21304 optionally specified as a locative adjunct, as in (51), or with the dative in the case
 21305 of people as in (52).

- 21306 (51) <*shangdian*> *wi-ŋguw* *ky-χtu* *yŋzu*
 shop 3SG.POSS-inside OBJ:PCP-buy exist:SENS
 21307 'It (can) be bought in a shop.' (28-CAmWGdW, 107)

- 21308 (52) <*wugui*> *wi-kui-ntsye* *yŋzu* *tce, nunura nu-cki*
 turtle 3SG.POSS-SBJ:PCP-sell exist:SENS LNK DEM.PL 3PL.POSS-DAT
 21309 *li* *wi-ndza* *ra ky-χtu* *yŋzu.*
 again 3SG.POSS-food PL OBJ:PCP-buy exist:SENS
 21310 'There are people_i who sell turtles_j, and one (can) buy their_j food from
 21311 them_i.' (140510 wugui, 33)

21312 The causative form *sui-χtu* has several meanings, including the factitive 'cause
 21313 to buy' and instrumental 'buy with' (see 54 below), but can also mean 'sell'. This
 21314 meaning is found in (53) with 3→1SG indexation: the transitive subject of *suiχtu* in
 21315 this construction is both causer and source, while its direct object is the recipient.

- 21316 (53) *pvnma wombyr kuu [...] t̪-wy-su-χtua-a yu*
 ANTHR ERG AOR-INV-CAUS-sell-1SG be:FACT
 21317 ‘It is Padma ’Od’bar who sold it to me.’ (2012 Norbzang, 157)

21318 Case marking is completely different when *sui-χtu* has the factitive function
 21319 ‘cause to buy’, as in (54): the source of the transaction (*t̪-mthum u-kuu-ntsye* ‘the
 21320 meat seller’) is marked with the dative as with the base verb above in (52).⁶ The
 21321 causative *suiχtu* therefore has two different argument structures depending on
 21322 whether it reflects the inversive (‘sell’, 53) or factitive/missive (with associated
 21323 motion ‘send to buy’ as in 54, §17.2.5.1) functions of this derivation.

- 21324 (54) *t̪-mt^hum u-kuu-ntsye u-cki tce*
 INDEF.POSS-meat 3SG.POSS-SBJ:PCP-sell 3SG.POSS-DAT LOC
 21325 *t̪-mt^hum c-to-sui-χtu q^he,*
 INDEF.POSS-meat TRAL-IFR-CAUS-buy LNK
 21326 ‘She send him to buy meat at the butcher’s.’ (160701 poucet2, 15)

21327 17.2.5.8 Instrumental

21328 The causative prefix occurs on transitive verbs to mark an instrument, syntac-
 21329 tically treated as a causee as in (55), where the Chinese loanword 粉笔 <fēnbǐ>
 21330 ‘chalk’ occurs with ergative marking (§8.2.2.4).

- 21331 (55) *tcaχpa vnuuz nuu kuu, nyki, <alibaba> yuu u-kum nūtcu*
 thief two DEM ERG FILLER ANTHR GEN 3SG.POSS-door DEM:LOC
 21332 <fenbi> kuu, nykinu, kuu-yrтum ci to-sui-rvt-ndzi
 chalk ERG FILLER SBJ:PCP-be.round INDEF IFR-CAUS-write-DU
 21333 ‘The two thieves drew a circle on Alibaba’s door.’ (140512 alibaba-zh, 181)

21334 However, the causative prefix is not required with overt instruments, as in
 21335 (56).

- 21336 (56) *u-jab kuu ju-maurbuuz juw-c^ha,*
 3SG.POSS-hand ERG IPFV-scratch SENS-can
 21337 ‘(The mole) can scratch it with its claws.’ (28-qapar, 159)

⁶One should note however that the verb in (54) has the translocative prefix, and that the dative argument could also in principle be analyzed as a goal (§15.2.7), though in this case the locative *ri* would rather be expected – compare with examples 197 and 198 in §15.2.5.

21338 The co-existence of an overt instrument in the ergative with an overt transitive
 21339 subject in the same clause (without any pause) is clumsy. Example (57a) for in-
 21340 stance is considered infelicitous if borderline ungrammatical, and the alternative
 21341 construction with two clauses (57b) is highly preferred.

- 21342 (57) a. ??*wizo kuu spuwyuu kuu t̪yscoz pa-suu-rxt*
 3SG ERG pen ERG letter AOR:3→3'-CAUS-write
 21343 (intended meaning:) 'S/he wrote the letter with the pen.' (elicited)
 21344 b. *wizo kuu spuwyuu ta-nodo tce t̪yscoz pa-suu-rxt*
 3SG ERG pen AOR:3→3':UP-take LNK letter AOR:3→3'-CAUS-write
 21345 'S/he took the pen and wrote the letter with it.' (elicited)

21346 With intransitive bases (such as *βzi* 'get drunk' in 58), the causative expresses
 21347 a cause (§8.2.2.5) rather than an instrument.

- 21348 (58) *cʰa kuu ló-wy-suu-βzi*
 alcohol ERG IFR-INV-CAUS-become.drunk
 21349 'He became drunk from the alcohol.' (elicited)

21350 The irregular causative *çufkaβ* 'cover with' (from the transitive *fkaβ* 'cover',
 21351 §17.2.2.1) has an instrumental function, and the instrument is marked with the
 21352 ergative as in (59).

- 21353 (59) *kʰylβ kuu tutʰu puu-çuu-fkaβ-a*
 cover ERG pan AOR-CAUS-cover-1SG
 21354 'I covered the pan with a cover.' (elicited)

21355 Another irregular causative, *zmbri* 'play' (from *mbri* 'cry'), can also be inter-
 21356 preted as an instrumental causative, but treats the instrument as object (§17.2.2.4)
 21357 without ergative.

21358 17.2.5.9 Tropative

21359 A handful of verbs with a sigmatic causative prefix have a tropative 'find X, con-
 21360 sider X' rather than a factitive meaning, the same as what would have been ex-
 21361 pected from a *ny-* tropative derivation (§17.5).

21362 The most common tropative causative is *znyja* 'find X a shame', 'hate to part
 21363 with' (60) (in Chinese 舍不得 <shébùdé> 'hate to part with'), which derives from
 21364 the intransitive *nyja* 'be a shame' (61).

- 21365 (60) *ui-mu* *ui-wa* *ni kuu pui-z-nvja-ndzi* *q^he*
 3SG.POSS-mother 3SG.POSS-father DU ERG SENS-CAUS-be.a.shame-DU LNK
 21366 *muu-ta-suu-ye-ndzi*,
 NEG-AOR.3→3':UP-CAUS-come-DU
 21367 'Her parents could not stand to part with her, and did not let her come.'
 21368 (14-siblings, 304)
- 21369 (61) *tce tui-ji* *pui-nvja*.
 LNK INDEF.POSS-field SENS-be.a.shame
 21370 'These fields, what a shame (nobody is taking care of them).'

21371 Other examples of tropative causative include *zvrtca* 'consider to be wrong'
 21372 from *yrtca* 'be wrong' (46, §18.3.1.4), *zvryngi* 'consider to be right' from *yryngi* 'be
 21373 right' and *znrykyro* 'find okay' from *nrkyro* 'be okay' (itself a denominal verb,
 21374 §20.7.1). The velar causative also has tropative uses (§17.3.3.1).

21375 The expected tropative forms †*nrvnyja*, †*nrvyrtca*, †*nrvryngi* and †*nrvnykyro* are
 21376 not attested.

21377 In addition, the verbs *supa* 'consider' and *srrtsi* 'count as', causatives of *pa* 'do'
 21378 (§22.4.2.5, §10.1.7.1) and *artsi* 'be counted as' (§17.2.8) are used in the periphrastic
 21379 tropative construction (§24.5.1.2).

21380 The causative of the denominal verb *afsuja* 'be of the same size' (§20.2.1) has
 21381 the near-tropative meaning 'compare the length/size of X and Y' (rather than
 21382 'make X and Y have the same length' or 'consider that X and Y have the same
 21383 length') as in (62).

- 21384 (62) *mbro ui-jme* *cho* *ny-kvrme* *tú-wy-su-ysfsuja*
 horse 3SG.POSS-tail COMIT 2SG.POSS-hair IPFV-INV-CAUS-be.of.same.size
 21385 *ra*
 be.needed:FACT
 21386 'Let us compare the (length) of the horse's tail and that of your hair.' ('Let
 21387 us see which is longest.') (2014-kWLAG, 675)

21388 17.2.5.10 Applicative

21389 The *sui-* prefix has a value that can be described as applicative comitative when
 21390 used with the motion verb *rjuy* 'run'.

21391 Its causative form *surjuy*, in addition to the regular missive meaning 'cause to
 21392 gallop', can also serve as an allative transitive verb of manipulation 'run away
 21393 with' (§15.1.2.2), as in (63).

- 21394 (63) *jułpa u-pci tce c^hy-sur-rfury.*
 village 3SG.POSS-outside LOC IFR:DOWNSTREAM-CAUS-run
 21395 ‘He ran away from the village carrying her (on his back).’ (150829
 21396 jidian-zh, 83)

21397 17.2.6 Stative verbs

21398 Although the velar causative *yṛ-*, rather than the sigmatic prefixes, occurs with
 21399 most stative verbs, some stative verbs only appear with allomorphs of the sig-
 21400 matic causative.⁷ Table 17.6 presents a list of representative examples.

Table 17.6: Examples of the sigmatic causative prefixes with stative verbs

Base verb	Causative verb	
<i>wyrum</i> ‘be white’	<i>sui-wyrum</i>	§17.2.1.4
<i>naṣ</i> ‘be black’	<i>suw-ṇaṣ</i>	§17.2.1.4
<i>arji</i> ‘be blue’	<i>sui-yṛji</i>	§17.2.1.3
<i>yurni</i> ‘be red’	<i>z-yurni</i>	§17.2.1.1
<i>mṛtsaβ</i> ‘be spicy’	<i>z-mṛtsaβ</i>	
<i>pe</i> ‘be good’	<i>sṛ-pe</i>	§17.2.2.7
<i>mṛym</i> ‘hurt’ (of a body part)	<i>csu-mṛym</i>	§17.2.2.1

21401 Stative verbs with a prefixal syllable (*mṛ-*, *rṛ-*, *yū-* etc), always appear with
 21402 *z-*, never with *yṛ-* (except some examples with the prefixal element *a-*). This con-
 21403 straint explains for instance why the causative of *mṛtsaβ* ‘be spicy’ is in *z-* rather
 21404 than *yṛ-*, while almost all other stative verbs denoting feelings or taste have a cau-
 21405 sative in *yṛ-*, for instance *tçur* ‘be sour’ → *yṛtçur* ‘make sour’ and *tsri* ‘be salty’ →
 21406 *yṛtsri* ‘make salty’.

21407 Color stative verbs and stative verbs related to disease and pain (*ngo* ‘get sick’,
 21408 *mṛym* ‘hurt’ etc) also form their causative with *su-* and its variants rather than
 21409 with *yṛ-*, as seen in the table above.

21410 Only a handful of stative verbs are compatible with both velar and sigmatic
 21411 causative prefixes. The semantic contrast between them is treated in §17.3.3.2.

⁷See §17.2.4.6 and §17.2.4.7 concerning some uses of the causativized stative verbs.

21412 17.2.7 Recursion

21413 The causative is the only derivation in Japhug that can occur twice in the same
 21414 form. A second causative prefix can appear on lexicalized causative verbs, in
 21415 particular those with irregular allomorphs (§17.2.2), such as *guunqor* ‘hang’ in
 21416 (64), where the additional *sui-* prefix has a factitive function.

- 21417 (64) *mbro numuu w-ku p̥jy-sui-pʰut tce, w-ku numuu*
 horse DEM 3SG.POSS-head IFR-CAUS-take.off LNK 3SG.POSS-head DEM
 21418 *zara yuu nuu-kvntcʰab yuu w-kum nuutcu*
 3PL GEN 3PL.POSS-street DEM 3SG.POSS-door DEM:LOC
 21419 *to-sui-ciu-nqor.*
 IFR:UP-CAUS-CAUS-hang
 21420 ‘She had (people) behead the horse, and hang its head on the city gate.’
 21421 (140428 mu e guniang-zh, 107-108)

21422 The rogative verb *svjtsʰi* ‘ask for something to drink’ (§18.2) also contains two
 21423 instances of the sigmatic causative (at least historically), the irregular *j-* (§17.2.2.5),
 21424 preceded by the passive *a/ɣ-* whose vowel merges with another causative. The
 21425 underlying form of this verb is thus *sui-ɣ-j-tsʰi* (CAUS-PASS-CAUS-drink).

21426 However, double causativization also occurs with non-lexicalized causatives.
 21427 For instance, in (65) and (66), the *sui-* prefix closest to the stem is factitive, and
 21428 the one added to it has the instrumental function (§17.2.5.8), meaning ‘cause to
 21429 *X* with’.

- 21430 (65) *numuu kuu pjú-wy-sui-sui-spoꝝ jnu-ŋu.*
 DEM ERG IPFV-INV-CAUS-CAUS-have.a.hole SENS-be
 21431 ‘One makes a hole (into it) with this.’ (24-mbGo, 8)

- 21432 (66) *ci nuu tce tce smi pjú-wy-βluu tce nuu smumba nuu kuu*
 one DEM LNK LNK fire IPFV-INV-burn LNK DEM flame DEM ERG
 21433 *wu-rme nuu kú-wy-sui-sui-βyut jnu-ra.*
 3SG.POSS-hair DEM IPFV-INV-CAUS-CAUS-burn.off SENS-be.needed
 21434 ‘The other (method to take out chicken feathers) is to make a fire and
 21435 burn off the feathers with the flames.’ (150907 kAnWtChWwWt, 21)

21436 In (65) and (66), the base verbs *spoꝝ* ‘have a hole’ and *βyut* ‘be burned off’ (of
 21437 hairs/feathers) are intransitive, but double causativization is also possible with
 21438 transitive bases, as in (67).

- 21439 (67) *pur-ta-suu-su-rrt*
 AOR-1→2-CAUS-CAUS-write
 21440 ‘I made you write it_i with it_j’.

21441 Another type of double causative occurs when sigmatic and velar causative
 21442 prefixes are combined (§17.3.4).

21443 **17.2.8 Compatibility with other derivations**

21444 As the most productive verbal derivation, the sigmatic is also the one that is
 21445 compatible with the greatest number of other derivations.

21446 Table 17.7 lists the derivational prefixes that can follow the causative in the
 21447 prefigural chain (following the regular allomorphy described in §17.2.1). Since all
 21448 cases are exemplified and discussed in the relevant sections, the data is not re-
 21449 produced here. Despite the considerable number of prefixes that are compatible
 21450 with the sigmatic causative, the reflexive *zγr-* (§18.3.4), *sγ-* antipassive (§18.6.2)
 21451 and proprietive (§18.8) derivations are never preceded by the sigmatic causative.
 21452 The autive does not normally follow the causative, except in a handful of lexical-
 21453 ized examples (§19.1.6).

Table 17.7: Derivations following the sigmatic causative in the prefigural chain

Derivation	Form	Reference
Applicative	<i>z-nu/γ-</i>	§17.4.4
Tropative	<i>z-ny-</i>	§17.5.4
Velar causative	<i>z-γγ-</i>	§17.3.4
Passive	<i>suu-γ-</i>	§18.1.6, §18.2
Reciprocal	<i>suu-γ- + reduplication</i>	§18.4.1.2
Anticausative	<i>suu(γ)+prenasalization</i>	§18.5.6
Antipassive	<i>z-rr-</i>	§18.6.9
Antipassive	<i>z-rr-</i>	§18.6.9
Distributed property, reciprocal	<i>suu-γmu-</i>	§18.7, §18.4.2.5
Facilitative	<i>z-nuyu-</i>	§18.9.2
Distributed action	<i>z-ny- + reduplication</i>	§19.4.3

21454 Fewer derivations can occur before the causative in the prefixal chain. The
 21455 other valency-increasing derivations (applicative, tropative, velar causative) ne-
 21456 ver take a sigmatic causative verb as input. Among valency-decreasing deriva-
 21457 tions, the anticausative prenasalization is never attested on causative verbs.

21458 Three valency-decreasing derivations precede the causative only in a handful
 21459 of lexicalized verbs. The antipassive and passive derivations are only found on
 21460 *ryjts'hi* ‘give to someone to drink’ (§18.6.4) and *ajts'hi* ‘be given to drink’ (§18.1.4),
 21461 from the irregular causative *jts'hi* ‘give to drink’ (§17.2.2.5) of *ts'hi* ‘drink’ and *s̥nu-*
 21462 *suk'ho* ‘rob people’ from the autive-causative *nusuk'ho* ‘rob, extort’ (§18.6.9).

21463 In addition, the progressive prefix *asu-* probably derives from the combination
 21464 of the passive with the sigmatic causative (§21.6.1.3), but cannot be analyzed this
 21465 way synchronically.

21466 The derivations that can productively take a sigmatic causative verb as input
 21467 are presented in Table 17.8.

Table 17.8: Derivations preceding the sigmatic causative in the prefixal chain

Derivation	Form	Reference
Reflexive	<i>z̥y̥-sui(y)-</i>	§18.3.4
Reciprocal	<i>a-sui(y)-</i> + reduplication	§18.4.1.2
Facilitative	<i>nuuyu-<i>sui(y)-</i></i>	§18.9.2
Autive	<i>nu-<i>sui(y)-</i></i>	§19.1.2

21468 From Tables 17.7 and 17.8, we see that only two derivations, the reduplicated
 21469 reciprocal (§18.4.1.2) and the *nuuyu-* object-oriented facilitative (§18.9.2) can both
 21470 freely precede and follow the sigmatic causative in the prefixal chain. Unlike
 21471 negation (§17.2.4.4) and associated motion (§17.2.4.5) prefixes, whose semantic
 21472 scope with the causative is independent of their relative position in the template,
 21473 in the case of the reciprocal and facilitative, the relative position influences the
 21474 semantic scope of the prefixes (§11.2.2).

21475 17.3 Velar causative

21476 The velar causative prefix *y̥-* (in the Kamnyu dialect, corresponding to *w̥-* in
 21477 eastern dialects) is the second causative derivation found in Japhug. Unlike the
 21478 sigmatic causative (§17.2), it is restricted to stative verb bases. Not all stative verbs,

however, build their causative form with the velar causative. In particular, poly-syllabic bases, including those whose non-final syllable is a derivation prefix or an unanalyzable element (such as *a-*, *nV-*, *rV-*, *sV-* etc) can only be causativized with sigmatic prefixes (§17.2.6). A handful of verbs are compatible with both velar and sigmatic causative prefixes (§17.3.3.2).

Table 17.9 presents a representative sample of velar causative verbs, including adjectival stative verbs, existential verbs and modal verbs. The presence of Tibetan loanwords such as *dvn* ‘be many’, *βdi* ‘be well’ and *ts^hoz* ‘be complete’ (from རྩྚ· *ldan* ‘possessing’, རྒྱ· *bde* ‘well’ and ཀྲྱྤ· *ts^hajs* ‘complete’) in the list shows that this prefix is productive.

Table 17.9: Examples of velar *γ-* causative derivations

Base verb	Derived verb
<i>dvn</i> ‘be many’	<i>γvdvn</i> ‘increase’
<i>βdi</i> ‘be well’	<i>γvβdi</i> ‘repair’, ‘make better’
<i>ts^hoz</i> ‘be complete’	<i>γvts^hoz</i> ‘make complete’
<i>wxti</i> ‘be big’	<i>γvwxti</i> ‘make bigger’
<i>jom</i> ‘be broad’	<i>γvjom</i> ‘broaden’
<i>mna</i> ‘be better’	<i>γvmna</i> ‘heal’, ‘make better’
<i>smi</i> ‘be cooked’	<i>γvsmi</i> ‘cook’
<i>me</i> ‘not exist’	<i>γvme</i> ‘destroy’
<i>mar</i> ‘not be’	<i>γvmar</i> ‘cause not to be’
<i>ra</i> ‘be needed’	<i>γvra</i> ‘cause to have to’
<i>k^huu</i> ‘be possible’	<i>γvk^huu</i> ‘make it possible to’

The velar causative *γ-* prefix is homophonous with a few other derivational prefixes, including denominal (§20.5), deideophonic (§20.9.1) and subject-oriented facilitative (§18.9.1). The latter derives intransitive verbs whose stems are identical (with different conjugations however) to those of velar causatives, for instance *γvwxti* ‘become big easily’ vs. *γvwxti* ‘make bigger’ from *wxti* ‘be big’.

The causative verbs from complement-taking modal verbs such as *k^huu* ‘be possible’ can occur with nominal objects, especially abstract nouns as in (68), but are more commonly found with complement clauses as objects (§17.3.2.3).

- (68) *ndzi-tutseye ra muu-nuu-ky-γy-k^huu ftcaka ntsuu*
 2DU.POSS-commerce PL NEG-IPFV-INF-CAUS-be.possible manner always

21498 *tu-βze* *pjy-ηu.*
 IPFV-make[III] IFR.IPFV-be

21499 ‘He was always trying (by all means) to make it impossible for them to
 21500 manage their business.’ (150825 baishe zhuan-zh, 102)

21501 17.3.1 Irregular allomorphs

21502 Irregular allomorphs of the velar causative are very rare and highly lexicalized.
 21503 The *γγ-* prefix clearly originates from earlier **wp-*, as shown by the form *wγ-* in
 21504 eastern Japhug dialects and the cognate prefixes *wp-* in Tshobdun and Zbu (Sun
 21505 2014a). The vowel-less irregular allomorphs originate from earlier **w-*, nasalized
 21506 to /m/ before nasal and prenasalized stops.

21507 A /w-/ allomorph, realized as *β-*, is found in the verb *βri* ‘protect’, ‘save’ (69),⁸
 21508 which derives from the intransitive *ri* ‘remain’, ‘be left’ (see examples 87, §7.3.3.3
 21509 and 131, §14.5.1.4). The bare root *ri* is also attested in the transitive verb *ri* ‘save’
 21510 (always in collocation with *tui-sros* ‘life’, §22.4.3.2), a zero derivation from *ri* ‘re-
 21511 main’ (§14.5.1.4).

- 21512 (69) *nγ-pi* *ni tγ-tui-βri-t* *ηu*
 21513 2SG.POSS-elder.sibling DU AOR-2-save-PST:TR be:FACT
 ‘You saved your two elder brothers.’ (qachGa 2003, 130)

21514 The lexicalized causative *βri* can be subjected to reflexivization (§18.3.4) in
 21515 *zγγβri* ‘protect oneself’ (example 15, §6.2.1).

21516 The regular sigmatic causative *suy-ri* from the base verb *ri* ‘remain’ also exists,
 21517 and predictably means ‘leave, not use up completely’ as in (70). It is probable
 21518 that *βri* originally also had a meaning close to that of *suy-ri*, and then changed to
 21519 ‘save, protect’.

- 21520 (70) *ki* *a-tγ-tui-ndze* *qʰe qʰe uu-qa* *nuitcu*
 21521 DEM.PROX IRR-PFV-2-eat[III] LNK LNK 3SG.POSS-bottom DEM:LOC
tui-ndzruu *jamar ci* *zo* *a-nuu-tui-suy-ri* *ma*
 21522 INDEF.POSS-nail about INDEF EMPH IRR-PFV-2-CAUS-remain LNK
 ‘When you eat this, leave a (quantity of) about a nail (from it in the bowl).’
 21523 (2003kandZislama, 80)

⁸This verb can take as object the entity being protected as in (69) (see also 45, §14.3.2.3), but also in some cases the entity one protects something from; for instance the participial clause *qale uu-kwu-βri* (wind 3SG.POSS-SBJ:PCP-protect) means ‘(hedge) that protects from the wind’.

21524 The *m*- allomorph of the velar causative occurs in the verb *m̥no* ‘prepare’ (see
 21525 36 in §8.2.2.1, and the discussion in §16.5.1), a causative of the intransitive stative
 21526 verb *ño* ‘be ready’ (with nasalization **w*-*ño* → *m̥no*). This intransitive verb is par-
 21527 ticularly common in the participle form *kui-ño* ‘already prepared, ready to (eat)’
 21528 (corresponding to Chinese 现成 <xiànchéng> ‘ready-made’), as in (71).

- 21529 (71) *ma jinde tce ku-χsu-j me kui-ño ntsu*
 LNK nowadays LNK IPFV-raise-1PL not.exist:FACT SBJ:PCP-be.ready always
 21530 *tu-ndza-j cti ma*
 IPFV-eat-1PL be.AFF:FACT LNK
 21531 ‘Nowadays we do not raise (chicken) anymore, we eat ‘ready-made’
 21532 (eggs).’ (22-kumpGa, 85)

21533 Like *bri* above, the causative *m̥no* can be reflexivized to *z̥yym̥no* ‘prepare oneself’
 21534 (§18.3.4). A regular causative form *suy-ño* ‘prepare’ is also attested, but it is much
 21535 rarer than *m̥no*, and the semantic difference between these two causative forms
 21536 has not been elucidated.

21537 Another example of the nasalized *m*- allomorph is the rare transitive verb
 21538 *mdzar* ‘drip dry’ (73) which derives from the intransitive verb *ndzar* ‘drip dry’
 21539 (72).⁹ The onset *mdz-* is phonologically /mndz-/, with the causative **w*- prefix
 21540 nasalized by the prenasalized voiced affricate /ndz/, a unitary phoneme (§4.2.1.9).

- 21541 (72) *tui-ŋga nui-χtci-t-a tce a-pui-ndzar tce*
 INDEF.POSS-clothes AOR-wash-PST:TR-1SG LNK IRR-PFV-drip.dry LNK
 21542 *cʰū-wy-ckʰo jyγ*
 IPFV:DOWNTREAM-INV-spread be.allowed:FACT
 21543 ‘I have washed the clothes, let them first drip dry before putting them to
 21544 the sun to dry.’ (elicited)

- 21545 (73) *mbryz kui-fse lo, <cai> kui-fse numara tce,*
 rice SBJ:PCP-be.like SFP dish SBJ:PCP-be.like DEM:PL LNK
 21546 *u-ŋgu tui-ci kui-tu nuara*
 3SG.POSS-inside INDEF.POSS-water SBJ:PCP-exist DEM:PL
 21547 *pjú-wy-su-yreco tce, numuu “pui-mdzar-a” tu-kui-ti*
 IPFV-INV-CAUS-be.finished LNK DEM AOR-drip.dry-1SG IPFV-GENR-say

⁹This verb also appears in participial form in the compound *kundzarmu* ‘type of rain’ (see 51, §16.1.1.7).

21548 *ŋu.*

be:FACT

21549 'When one has completely removed the water in the rice or in a dish, one
21550 says *pu-mdzar-a*.' (definition)21551

17.3.2 Morphosyntax

21552

17.3.2.1 Negation

21553 The combination of the velar causative with negation prefixes is ambiguous. As
21554 in the case of the sigmatic causative (§17.2.4.4), the scope of the negation can
21555 either include the causation ('not cause to *X*') or not ('cause not to *X*'). For in-
21556 stance, the causative *y̥wxti* 'make bigger' in negative form can either be 'not
21557 make bigger', or 'make smaller' as in (74).

- 21558 (74)
- w-pʰw*
- p̥w-wxti*
- tce*
- ,
- nura*
- tʰamt̥cxt ma-tx-tu-y̥-wxti*
-
- 1SG.POSS-price SENS-be.big LNK DEM:PL all NEG-IMP-2-CAUS-be.big
-
- 21559 'It is expensive, make it less expensive.' (2010-12, 13)

21560 With the velar causative from modal verbs, the broad scope interpretation of
21561 the negation is very common. For instance, *y̥ra* 'cause to have to' and *y̥kʰu*
21562 'make it possible to' in the negative form generally mean 'cause not to have to'
21563 and 'make it impossible to' (§17.3.2.3).21564

17.3.2.2 Complement clauses with causative of manner

21565 As with the sigmatic causative (§17.2.4.7), the velar causative can derive comple-
21566 ment-taking verbs expressing manner (§24.5.1.4), selecting complement clauses
21567 with velar infinitive (§16.2.1.5) or bare infinitive (§16.2.2.1).21568 The examples in (75) illustrate the possible constructions with the causative
21569 *y̥t̥cʰom* 'make too much' from *t̥cʰom* 'be too much' and the verb *tsʰi* 'drink' ex-
21570 pressing the main action in the complement clauses. The velar infinitive (75a)
21571 and bare infinitive (75b) constructions have the same meaning 'drink too much',
21572 and the causative verb takes the orientation prefix normally selected by the verb
21573 in the complement clause, in this case either EASTWARDS (75a) or UPSTREAM (75b).

- 21574 (75) a.
- [cʰa kx-tsʰi] ko-y̥-t̥cʰom*
-
- alcohol INF-drink IFR-CAUS-be.too.much
-
- 21575 b.
- [cʰa w-tsʰi] lo-y̥-t̥cʰom*
-
- alcohol 3SG.POSS-BARE.INF:drink IFR-CAUS-be.too.much
-
- 21576 'He drank too much alcohol.' (elicited)

- 21577 c. *c^hytsh*i** *ko-yx-tc^hom*
alcohol.drinking IFR-CAUS-be.too.much
'He had drunk too much alcohol.' (150829 jidian-zh, 16)

In addition, example (75c) shows that object-verb action nominal compounds (§5.5.5.2, §16.4.7) can occur with causative verbs instead of complement clauses.

While action nominal compounds are rare, the causative complement construction with velar and bare infinitive is very common and compatible with all verb categories. Even noun-verb collocations such as *tu-xçrt+lyt* 'exert strength, do X forcibly' can occur in these complement clauses as in (76) (with an UPWARDS orientation preverb).

- 21586 (76) *rgytputu nuu kuu ui-tcuu ja-st^hoB tce, ui-xcxt*
 old.man DEM ERG 3SG.POSS-son AOR:3→3'-push LNK 3SG.POSS-strength
 21587 *ui-lxt to-y^h-tc^hom tce*
 3SG.POSS-release IFR-CAUS-be.too.much LNK
 21588 ‘The old man pushed his son, but exerted too much strength and...’
 21589 (150831 jubaopen-zh, 161-162)

All velar causative verbs, even those that are generally used with a concrete factitive meaning, can be used in these complement-taking constructions. For instance, *γρ-βdi* (from *βdi* ‘be well’), which can mean ‘repair’ with a nominal object (see 23, §6.3), occurs in the sense of ‘do X well, do X nicely’ with a complement clause as in (77).

- 21595 (77) *k^ha u-kyri nutcu u-fkrym*
 house 3SG.POSS-front DEM:LOC 3SG.POSS-BARE.INF:place
 21596 *a-ky-tuu-yy-βdi*
 IRR-PFV-2-CAUS-be.well
 21597 ‘Place these nicely (in order) in front of the house.’ (smanmi 2003.1, 253)

17.3.2.3 Modal and existential verbs

21599 Velar causative forms of modal verbs, in particular *yrra* ‘cause to have to’ and
21600 *yṛkʰw* ‘make it possible to’, are found with velar infinitive or finite complement
21601 clauses (§24.5.1.1) like the corresponding base verbs *ra* ‘be needed’ and *kʰw* ‘be
21602 possible’ (§24.5.3.1) as in (78), but not with bare or dental infinitives.

- 21603 (78) [kʂ-nw̚-tɔʂ] mu-tʂ-yʂ-k^huʂ-t-a.
 INF-AUTO-come.out NEG-AOR-CAUS-be.possible-PST:TR-1SG
 21604 'I preventing it/him from coming out.' (elicited)

21605 The object of the causative verb is most often the (transitive or intransitive)
 21606 subject of the complement clause as in (78), but not necessarily; in (79), the object
 21607 of *tx-yr-k^hu-t-a* is the possessor of the subject (in the possessive construction,
 21608 §22.5.2.1).

- 21609 (79) [u-rŋual k_y-tu] tx-yr-k^hu-t-a.
 3SG.POSS-money INF-exist AOR-CAUS-be.possible-PST:TR-1SG
 21610 ‘I made it possible for him.her to have money.’ (elicited)

21611 In (80), the causative *yr̥ra* occurs with a clause containing the form *ku-ra* that
 21612 can either be interpreted as a relative (with a subject participle) or as a com-
 21613 plement clause (in which case the *ku-* prefix is preferably analyzed as a stative
 21614 infinitive).

- 21615 (80) <xianling> nuu nuu-rga q^hendyre, [...] [nuu-ŋjɔv
 magistrate DEM AOR-be.happy LNK 3PL.POSS-servant
 21616 kuu-ra] nuu muu-jy-yr̥-ra q^he,
 SBJ:PCP-be.needed DEM NEG-IFR-CAUS-be.needed LNK
 21617 ‘The magistrate was happy, and cancelled the duties that they had to do.’
 21618 (150904 cuzhi-zh, 187)

21619 The existential verb *tu* (§22.5.1.2) can also be subjected to the *yr̥-* derivation,
 21620 which yields the verb *yr̥tu* ‘cause to have’. This form is used to causativize pos-
 21621 sessive constructions (§22.5.2) or noun-verb collocations (§22.4.1) as in (81).

- 21622 (81) a-xcxt zo tu-yr̥te tce
 1SG.POSS-strength EMPH IPFV-CAUS-exist[III] LNK
 21623 ‘(The rain, flowing on my body), gives me (makes me have) strength.’
 21624 (150819 woniu-zh, 55)

21625 17.3.2.4 Collocations

21626 Complex predicates comprising a noun-verb collocation can undergo causativiza-
 21627 tion with the *yr̥-* prefix.¹⁰

21628 For instance, the combination of the lexicalized object participle *k_y-ti* (OBJ:PCP-
 21629 say) with the existential verb *me* ‘not exist’, which means ‘have nothing to say’
 21630 or ‘be unable to say for sure’ (see example 93, §16.1.2.7), can be causativized to
 21631 *k_y-ti + yr̥-me* ‘cause X to have nothing to say’ as (82).

¹⁰The causativization of complex predicates with the sigmatic prefixes is treated in §17.2.4.9.

- 21632 (82) *rjylpu nuu uu-ky-ti na-yy-me*
 king DEM 3SG.POSS-OBJ:PCP-say AOR:3→3'-CAUS-not.exist
 21633 ‘He made the king unable to say anything.’ (2005 tAwakWcqraR, 110)

21634 17.3.3 Semantics

21635 17.3.3.1 Tropative

21636 The velar causative does have a tropative interpretation in specific contexts, like
 21637 the sigmatic causative (§17.2.5.9). The verb *y̥wxti* ‘make bigger’ from *wxti* ‘be big’
 21638 for instance can mean ‘find/consider to be bigger’ as in (83).

- 21639 (83) *kumab uu-yi nuara nuu-rtsawa*
 other 3SG.POSS-relative DEM:PL 3PL.POSS-importance
 21640 *nuu-pjy-nuu-yy-wxti*
 NEG-IFR.IPFV-AUTO-CAUS-be.big
 21641 ‘He did not consider his other relatives to be as important (as his wife).’
 21642 (kWjujmAlu 2003, 64)

21643 A tropative velar causative with a slightly lexicalized meaning is *y̥kʰe* ‘depre-
 21644 ciate, demean’ (84) (see also 141, §16.1.3.10), from *kʰe* ‘be stupid’.

- 21645 (84) *uu-kui-n-nymqe, uu-kui-nyre, uu-kui-yy-kʰe nuara*
 3SG.POSS-AUTO-scold 3SG.POSS-laugh.at 3SG.POSS-CAUS-be.stupid DEM:PL
 21646 *nuu-xcat zo.*
 SENS-be.many EMPH
 21647 ‘There were many people scolding him, making fun of him, calling him
 21648 stupid.’ (150829 phaRrgot, 13)

21649 17.3.3.2 Velar vs. sigmatic causatives

21650 Some stative verbs are compatible with both sigmatic (§17.2.6) and velar causative
 21651 prefixes, an observation which raises the question of the semantic distinction
 21652 between these two derivations when contrastive.¹¹

21653 Sun (2006b; 2014a), with regard to the causative prefixes *sə* and *wv-* in Tshob-
 21654 dun, proposes that in the case of some stative verbs, the former indicates an
 21655 increase of degree (85a), while the latter expresses a change of state (85b).

¹¹The contrast between the two causative derivations in the case of the irregular allomorphs *β*- and *m-* is discussed in §17.3.1.

In Japhug, it is not completely clear whether a semantic contrast of the same type is attested. Minimal pairs such as *sux-čʰi* and *yṛ-čʰi* from *čʰi* ‘be sweet’ or *sux-tṣur* and *yṛ-tṣur* from *tṣur* ‘be sour’ do exist, but no consistent semantic difference appears to exist between them.

¹² Examples (86) and (87) suggest that the causative *sux-tçur* means ‘make sour’ rather than ‘make more sour’ as would be expected following Sun’s analysis of Tshobdun.¹²

- 21667 (86) *tce txjko muu-tx-tcur tce, ncolo uu-mat nuu*
LNK pickle NEG-AOR-be.sour LNK *Ribes.stenocarpum* 3SG.POSS-fruit DEM

21668 *pjúa-wy-p^hut tce, tce tyrca pjúa-wy-y^h-la tce, tce txjko*
IPFV-INV-take.off LNK LNK together IPFV-INV-CAUS-soak LNK LNK pickle

21669 *pjuu-suux-tcur c^ha.*
IPFV-CAUS-be.sour can:FACT

21670 ‘When the pickle_i is not sour, one picks fruits from the *Ribes*

21671 *stenocarpum_j*, soaks it together (with it_i), and it_j can make the pickle sour.’

21672 (18-NGolo, 27)

- | | | | | | |
|-------|------|--|---|-----------------------------|--|
| 21673 | (87) | <i>wu-tur-teur</i> | <i>kui tur-kur</i> | <i>wi-ŋgwu</i> | |
| | | 3SG.POSS-NMLZ:DEG-be.sour | ERG GENR.POSS-mouth | 3SG.POSS-inside | |
| 21674 | | <i>lú-wy-rku</i> | <i>q^he maka nui-sur-ymwz-ziyut</i> | <i>q^he,</i> | |
| | | IPFV:UPSTREAM-INV-put.in LNK | at.all IPFV-CAUS-DISTR-reach LNK | | |
| 21675 | | <i>tui-p^horjbu</i> | <i>ra kuniy nui-suix-teur</i> | <i>kui-fse cti</i> | |
| | | GENR.POSS-body PL | also SENS-CAUS-be.sour | SBJ:PCP-be.like be.AFF:FACT | |
| 21676 | | 'It is so sour that when one puts it into one's mouth, it makes everything | | | |
| 21677 | | (sour in an even way), as if one's whole body becomes sour.' | | | |
| | | (09-mi, 68) | | | |

¹²In the case of (86), it is possible that *txjko mu-tr-tçur* can be contextually translated as ‘when the pickle is not sour enough’, and that therefore the verb *pju-sux-tçur* does indeed mean ‘make more sour’. Tshendzin proposed conflicting interpretations of this example. The occurrence of *sux-tçur* in (87) however is incompatible with an analysis in terms of heightened degree.

In addition, example (88) shows that the velar causative *yr-tçur* is not incompatible with the meaning ‘make more sour’. It is possible that other semantic parameters (such as direct/indirect causation and volitionality) are at play in the choice of the two prefixes.

The only verb root that has sigmatic and velar causative forms with clearly different meanings is *mto*, a labile verb meaning ‘see’ when conjugated transitively, and ‘have sharp eyesight’ when intransitive (§14.5.1.2). The sigmatic causative *sui-mto*, based on the transitive use of *mto*, means ‘let see, show’ as in (89).

- 21690 (89) *kuaki* *tx-ndym* *tce*, [...] *zimk^hym u-ku*, *tc^hi*
DEM.PROX IMP-take[III] LNK world 3SG.POSS-head what
21691 *kua-tu* *zo* *nua* *pjui-túi-wy-sui-mto* *cha*
SBJ:PCP-exist EMPH DEM IPFV-2-INV-CAUS-see can:FACT
21692 ‘Take this (spyglass), it will make you able to see everything that exists in
21693 the world.’ (140508 benling gaoqiang de si xiongdi-zh, 74-75)

The velar causative *yrmto* ‘cause to recover eyesight’ is based on the stative use ‘have sharp eyesight’. Just as the base verb requires the noun *tu-mnaw* ‘eye’ as intransitive subject (example 126, §14.5.1.2), *yrmto* requires it as object as in (90).

- 21698 (90) *nunu kuu maka nui-mprəs tu-yx-mtxm*
DEM ERG completely 3PL.POSS-eye IPFV-CAUS-have.sharp.eyesight[III]
21699 *c^ha ri,*
can:FACT LNK
21700 ‘That (plant) can cure their blindness (cause their eyes to recover
21701 eyesight).’ (140517 mogui de jing-zh, 85)

17.3.4 Compatibilities with other derivations

21703 Due to the constraint on monosyllabic bases (§17.2.6), the velar causative can only
21704 take bare verb roots (or at least verb roots containing frozen prefixes) as input,

21705 unlike the sigmatic causative which can precede a dozen derivational prefixes
 21706 (§17.2.8).

21707 The velar causative prefix can be preceded by the reflexive *z̥y̥r-* as in (91) (see
 21708 also 59, §18.3.4.1 and §18.3.4.2).

- 21709 (91) *icqʰa tui-xtsa numi tx-ky-sŋaš*
 the.aforementioned INDEF.POSS-shoe DEM:DU AOR-OBJ:PCP-enchant
 21710 *pj̥r-cti tce tcendyre, ny-z̥y̥r-yy-xtci-ndzi*
 IFR.IPFV-be.AFF LNK LNK IFR-REFL-CAUS-be.small-DU
 21711 ‘The shoes had been enchanted, and became small by themselves.’ (160706
 21712 poucet6, 98)

21713 It can also undergo reduplicated reciprocal derivation (80, §18.4.1.2), and occurs
 21714 with the autive *nu-* (83 in §17.3.3.1 above) and the *z-* allomorph of the sigmatic
 21715 causative (§17.2.1.1) as in (92).

- 21716 (92) *tce tsu ri ny-tui-z-yy-βdi-t cti tce, tce*
 LNK road also IFR-2-CAUS-CAUS-be.well-PST:TR be.AFF:FACT LNK LNK
 21717 *nutcu a-ky-tui-ce*
 DEM:LOC IRR-PFV:EAST-2-go
 21718 ‘(Since) you have already had the road repaired (by someone else), (take
 21719 that road) to go (east).’ (2011-04-smanmi, 149)

21720 The tropative causative *y̥kʰe* ‘demean’ (from *kʰe* ‘be stupid’, §17.3.3.1) also has
 21721 the *s̥r-* antipassive form (§18.6.2) *s̥rz-y̥r-kʰe* (APASS-CAUS-be.stupid) ‘demean peo-
 21722 ple’.

21723 17.4 Applicative

21724 The applicative *nu-* is a valency-increasing derivation by means of which an
 21725 oblique argument, an adjunct or even a non-participant (including comitative
 21726 or dative adjuncts and semi-objects, §17.4.1) is promoted to object function. In
 21727 Japhug, the base verb is always morphologically intransitive, and the applicative
 21728 verb transitive (§14.3.1). The subject of the applicative verb corresponds to the
 21729 same referent as that of the base verb, though it receives ergative case marking
 21730 instead of absolute (see examples 106 and 105 in §17.4.1 below).

21731 The *nu-* applicative is only attested by a limited number of examples (exhaus-
 21732 tively listed in Table 17.10; the allomorphy is discussed in §17.4.2), but the fact

21733 that it includes the Tibetan loanword *rga* ‘like, be glad’ (from རྒ ཁྱା: *dga* ‘be happy’)
 21734 shows that it has some degree of productivity.

21735 Cognates of the applicative prefix are found in other Gyalrong languages (in
 21736 Tshobdun, see Sun 2006b), and one potential example is found in Khroskyabs
 21737 (Lai 2017: 361). This prefix probably originates from the denominal *nu-* (§20.7.2),
 21738 and replaced the older suffixal applicative, which only remains in a handful of
 21739 examples (§17.4)

Table 17.10: Examples of the *nu-* applicative prefix

Base verb	Derived verb
<i>azužu</i> ‘wrestle’	<i>nryzužu</i> ‘wrestle with’
<i>akʰu</i> ‘call’	<i>nrykʰu</i> ‘invite’
<i>akʰyṣṇga</i> ‘shout, call’	<i>nrykʰyṣṇga</i> ‘shout at’
<i>andzut</i> ‘bark’	<i>nryndzut</i> ‘bark at’
<i>amdzu</i> ‘sit’	<i>nrymdzu</i> ‘look after’
<i>ayro</i> ‘play’	<i>nryro</i> ‘play with’
<i>stu</i> ‘believe’ (vi)	<i>nrystu</i> ‘believe’ (vt)
<i>mbyom</i> ‘be in a hurry’	<i>numbyom</i> ‘look forward to’
<i>ŋke</i> ‘walk’	<i>nurŋke</i> ‘look for’
<i>rga</i> ‘like’ (vi)	<i>nurga</i> ‘like’ (vt)
<i>sjom</i> ‘envy’ (vi)	<i>nusjom</i> ‘envy’ (vt)
<i>zduy</i> ‘suffer’	<i>nuzduy</i> ‘worry about’
<i>buuy</i> ‘miss’ (vi)	<i>nuybūy</i> ‘miss’ (vt)
<i>mu</i> ‘be afraid’	<i>nuyymu</i> ‘be afraid of’

21740 In addition to these examples, the *nr-* deideophonic verbs can be analyzed as
 21741 applicative derivations from their *a-* deideophonic counterpart (§20.9.3).

21742 17.4.1 The syntactic and semantic functions of the promoted argument

21743 Despite the limited number of applicative verbs, there is a considerable diversity
 21744 in the syntactic functions of the non-core arguments (of the base verbs) that are
 21745 promoted to object status by the applicative derivation.

21746 17.4.1.1 Promotion of comitative argument

21747 The verb *azuzu* ‘wrestle’, historically a reciprocal verb (§18.4.1.3), requires a non-
 21748 singular subject and can select a comitative argument in *c^ho* (§8.2.5). The object
 21749 of the applicative form *nryzuzu* ‘wrestle with’ corresponds to this comitative ar-
 21750 gument, as shown by the minimal pair (93) vs. (94).

- 21751 (93) *uu-zda* *c^ho* *nui-yzuzu-ndzi*
 3SG.POSS-companion COMIT SENS-wrestle-DU

21752 ‘He is wrestling with his friend.’ (elicited)

- 21753 (94) *uu-zda* *nui-yz-nui-yzuzu*
 3SG.POSS-companion SENS-PROG-APPL-wrestle
 21754 ‘He is wrestling his friend.’ (elicited)

21755 17.4.1.2 Promotion of semi-object (stimulus)

21756 In the case of the semi-transitive *rga* ‘like’, the argument added by the applica-
 21757 tive is the semi-object (§14.2.3). The base verb *rga* and its applicative form *nurga*
 21758 ‘like’ are in some contexts semantically identical, for instance in the pseudo-clefts
 21759 (§23.6.1) *stu ji-ky-rga* and *stu ji-ky-nui-rga* in (95) and (96) which both mean ‘the
 21760 one that we like most’ (both objects and semi-objects can be relativized with the
 21761 object participle §16.1.2.4, and the possessive prefix in both cases refers to the
 21762 subject §16.1.2.1).

- 21763 (95) *tce izo kuruu ra tce ts^hlu nui stu ji-ky-rga*
 LNK 1PL Tibetan PL LNK milk.tea DEM MOST 1SG.POSS-OBJ:PCP-like
 21764 *cti*
 be.AFF:FACT

21765 ‘Milk tea is the one (the type of tea) that we Tibetans like most.’ (05-qazO,
 21766 169)

- 21767 (96) *t^haxtsa nui izo kuruu tc^heme ra yuu, numuu mylyn zo*
 coloured.belt DEM 1PL Tibetan woman PL GEN DEM absolutely EMPH
 21768 *pjui-tu kuu-ra tce, stu ji-ky-nui-rga*
 IPFV-exist SBJ:PCP-be.needed LNK most 1PL.POSS-OBJ:PCP-APPL-like
 21769 *cti,*
 be.AFF:FACT

21770 ‘Coloured belts are something that we Tibetan woman must absolutely
 21771 have, and it is what we like most.’ (thaXtsa 2002, 92)

21772 In addition to morphological (§14.3.1) differences, as well as absolutive vs. ergative marking of the subject (§8.2.2.1), the base verb *rga* and its applicative *nurga* differ from each other in three regards.

21775 First of all, *rga* displays lability between a semi-transitive use ‘like’ and a stative
21776 intransitive use meaning ‘be happy’ (compare 142 and 143 in §14.5.3), while the
21777 applicative *nurga* does not mean ‘be happy because/for’.

21778 Second, only the base verb *rga* can take infinitival complement clauses (§16.2.1.5,
21779 §24.2.1.2), as in (97) (see also 177, §14.6.2), while the derived verb *nu-rga* cannot:
21780 the applicative derivation thus removes complement-taking ability (at least in
21781 this case).

- 21782 (97) *ma azo [qajui nuara kx-nyrtoχpjyt] puu-rga-a tce*
LNK 1SG bug DEM:PL INF-observe PST.IPFV-like-1SG LNK
21783 ‘I used to like to observe bugs.’ (26-quspunmbro, 15)

21784 Third, with first or second person objects, only the applicative *nurga* is possi-
21785 ble. The local scenario 1→2 (98) and 2→1 configurations (example 43, §5.1.2.12),
21786 as well as the mixed scenario inverse configurations (99) cannot be expressed
21787 with the base verb *rga*.

- 21788 (98) *puu-ta-ny-pe cti q^he, azo puu-ta-nu-rga*
SENS-1→2-TROP-be.good be.AFF:FACT LNK 1SG SENS-1→2-APPL-like
21789 ‘I like you, I love you.’ (160630 abao-zh, 113)
- 21790 (99) *numu rjylpu u-tcuu nuu kuu a-pú-wy-nu-rga-a*
DEM king 3SG.POSS-son DEM ERG IRR-IPFV-INV-APPL-like-1SG
21791 *ra*
be.needed:FACT
21792 ‘May the prince love me!’ (150819 haidenver-zh, 531)

21793 17.4.1.3 Promotion of dative argument

21794 The verbs *andzuit* ‘bark’ and *ak^hryzjga* ‘call’ optionally select a dative argument
21795 (*turme mx-kx-nufse nu* ‘the person that it does not know’ in 100), which is pro-
21796 moted to object status by the applicative (101).

- 21797 (100) *turme mx-kx-nufse nuu u-cki puu-xndzuit*
person NEG-OBJ:PCP-know DEM 3SG.POSS-DAT SENS-bark
21798 ‘(The dog) is barking at the unknown person.’ (elicited)

- 21799 (101) *turme my-ky-nufse nuu nur-yz-nuu-yndzuit*
 person NEG-OBJ:PCP-know DEM SENS-PROG-APPL-bark
 21800 ‘(The dog) is barking at the unknown person.’ (elicited)

21801 **17.4.1.4 Introduction of new referent**

21802 For most applicative verbs, the object corresponds to an entirely new referent,
 21803 without equivalent in the argument structure of the base verb. Based on the se-
 21804 mantic role of the added argument, four sub-cases can be distinguished.

21805 The semi-transitive verb *stu* ‘believe’, like *rga* ‘like’, is semi-transitive (§14.2.3).
 21806 Its semi-object is either a complement clause or a noun such as *w-rju* ‘his words’,
 21807 expressing the content of the utterance that is believed by the subject. Its (mor-
 21808 phologically irregular, §17.4.2) applicative *nystu* takes as object the person utter-
 21809 ing the words that are believed by the subject, as in (102), which is not expressed
 21810 as an argument of the base verb (with *stu* ‘believe’ the only way to express the
 21811 person saying the words that are believed is as possessor of the semi-object).

- 21812 (102) *nuunu azo w-pui-kui-ny-stu-a ny, tcendyre, nuacimuma*
 21813 DEM 1SG QU-SENS-2→1-APPL-believe-1SG ADD LNK immediately
 21814 *zo ce-tci tce,*
 21815 EMPH go:FACT-1DU LNK
 ‘If you believe me, let us go (there) immediately.’ (140425 shizi huli he
 lu-zh, 23)

21816 Examples like (103) with the relative clause *wzo kui ta-tut* ‘(the words) that he
 21817 said’ appearing before the verb could seem to imply that *nystu* can also select
 21818 as object the words uttered. If this analysis were correct, the applicative *nystu*
 21819 would be similar to *nurga* ‘like’ above in promoting the semi-object of its base
 21820 verb as object. However, if the relative clause takes a second person subject as
 21821 in (104), it is possible either to use the base verb *stu* ‘believe’ or the applicative
 21822 *nystu* with a second person object (*my-ta-nystu* ‘I don’t believe you’), but not with
 21823 a third person object, showing that in (103) the relative clause is not the object,
 21824 but an adjunct (the object of *nystu* in this example is the referent corresponding
 21825 to the subject of the relative clause).

- 21826 (103) *[wzo kui ta-tut] nuu ma-nur-tui-ny-ste*
 21827 1SG ERG AOR:3→3'-say[II] DEM NEG-IMP-2-APPL-believe[III]
 ‘Don’t believe what he said.’ (elicited)

- 21828 (104) [nyzo ty-tuu-tut] nu my-stu-a
 2SG AOR-2-say[II] DEM NEG-believe:FACT-1SG
 21829 'I don't believe what you said.' (elicited)

Other intransitive verbs with experiencer subject, such as *buy* ‘miss’, *mu* ‘be afraid’ and *sjom* ‘envy’, have applicative forms that promote the stimulus as object. The base verb forms cannot select a noun or a complement clause to specify this stimulus, even as adjunct; the stimulus can only be indirectly expressed in a separate clause. In (105) for instance, the clause *tr-tciu ... tu-yrçqali-nu* ‘the men ... shout’ describes the reason for the fear of the animals; though it could be analyzed as the stimulus of the verb *niu-mu-nu*, the relationship between the two clauses is simply one of temporality/causation, and the verb *mu* ‘be afraid’ is unable to take any overt stimulus.

- | | | | | |
|-------|-------|---|--|--|
| 21839 | (105) | <i>ty-tcu</i> | <i>t^hamtcyt kuu-duu-dyn</i> | <i>nua</i> |
| | | INDEF.POSS-boy all | SBJ:PCP-be.many | DEM |
| 21840 | | <i>yurnyyur</i> | <i>zo</i> | <i>tu-yycqali-nua tce, tcendyre</i> |
| | | IDPH(III):noisy.and.crowded | EMPH IPFV-shout-PL | LNK LNK |
| 21841 | | <i>ruidas</i> | <i>nura pua-mu-nua</i> | <i>tce c^huu-p^hyo-nua</i> |
| | | wild.animal | DEM:PL IPFV-be.afraid-PL | LNK IPFV:DOWNSTREAM-flee-PL |
| 21842 | | <i>pua-ηu.</i> | | |
| | | SENS-be | | |
| 21843 | | ‘The men (hunters) all shout together in great number, and the wild animals being afraid flee downstream.’ (150829 KAGWcAno, 10-11) | | |
| 21844 | | | | |

The corresponding applicative verb *nuymu* ‘be afraid of’ marks the experiencer in the ergative, and takes the stimulus (in 106, *turme* ‘people’) as object (note the generic object indexation, §14.3.2.5). The referent promoted as object by the applicative derivation in this verb is the same as that promoted to subject status by the proprietive *s(y)-* (see 180, §18.8).

- 21850 (106) *nunu kui turme wuma zo pur-kui-nuy-mu.*
DEM ERG people really EMPH IPFV-GENR:S/O-APPL-be.afraid
21851 'It is very afraid of people.' (24-ZmbrWpGa, 26)

21852 The verb *ayro* ‘play’ (almost always attested as *a<nu>yro* with infixation of
21853 the autive, §19.1.2), rarely occurs in the singular, and can select comitative argu-
21854 ments (§8.2.5), as in (107).

- 21855 (107) <*xiaocui*> *nua* *ty-rustummuu* *w-q^hu* *q^he* *tce*
 ANTHR DEM AOR-marry 3SG.POSS-after LNK LNK
 21856 *icq^ha* [*yuanfeng*] *nua*, *tañndo* *mx-kui-tso*
 the.aforementioned ANTHR DEM speech NEG-SBJ:PCP-understand
 21857 *nua c^ho]* *spikuku* *zo* *tuuturca* *pui-y<nu>yro-ndzi* *q^he*
 DEM COMIT every.day EMPH together IPFV-<AUTO>play-DU LNK
 21858 ‘After she married, Xiaocui played every day with Yuanfeng, who did
 21859 not understand speech.’ (150909 *xiaocui-zh*, 66)

21860 However, unlike *azuzu* ‘wrestle’ above, its applicative *nyyo* ‘play with’ does
 21861 not promote the comitative argument (the person one plays with) to object status.
 21862 Rather, it selects the instrument (the toy one plays with) as object. In (108), the
 21863 object of *nyyo* is not overt in the same clause, but anaphorically refers to *kumtc^hu*
 21864 ‘toy’ in the previous clause.

- 21865 (108) *myzui kumtc^hu kui-fse* *ty-tu* *ny*, *tuyryz*
 again toy SBJ:PCP-be.like AOR-exist ADD together
 21866 *pui-nua-nyyo-ndzi* *nura* *pjy-ŋgryl*,
 IPFV-APPL-play-DU DEM:PL IPFV.IFR-be.usually.the.case
 21867 ‘Whenever there was a toy_i, they(DU) played with it_i together.’ (IWlu, 17)

21868 17.4.1.5 A problematic case

21869 The relationship between the transitive verb *nuzduy* ‘worry about’ and the base
 21870 verb *zduy* ‘suffer’ (from 痛苦 *sdug* ‘suffering’) is slightly different from the prece-
 21871 ding cases, and it is disputable whether this verb is to be classified as applicative.
 21872 The intransitive verb *zduy* has two different meanings: ‘be sad’ when used with
 21873 the nouns *tu-sum* ‘mind’ or *tu-sni* ‘heart’ as subjects, and the experiencer as pos-
 21874 sessor as in (109), and ‘endure hardship’ when taking a human (or non-human
 21875 animal) subject (110). The meaning ‘worry’ of the verb *nuzduy* is not directly
 21876 derivable from either. It is close to ‘to be sad about’, but the transitive subject of
 21877 *nuzduy* corresponds to the possessor of the subject of *zduy*, making it a unique
 21878 type of derivation.

- 21879 (109) *tchemypuu nua w-sni* *ny-zduy*
 little.girl DEM 3SG.POSS-heart IFR-suffer
 21880 ‘The little girl was very sad.’ (140504 *huiguniang-zh*, 101)
 21881 (110) *lañnui-sŋi* *pjy-zdury-ndzi tce*,
 one.or.two-day IFR.IPFV-suffer LNK
 21882 ‘They had (worked) hard for several days.’ (qajdoskAt 2002, 35)

21883 17.4.2 Allomorphy

21884 The applicative prefix has three regular allomorphs: *nu-*, *nuy-* and *ny-*.¹³ The
 21885 allomorph *nuy-* has the same distribution as the *suy-* allomorph of the causative
 21886 ([§17.2.1.4](#)), occurring with monosyllabic intransitive verb roots whose onset does
 21887 not contain a cluster and/or a velar consonant. The allomorph *ny-* (homophonous
 21888 with the tropative, [§17.5.1](#)) is due to vowel fusion with the contracting *a-* in some
 21889 verb stems ([§12.3](#); the de-contracted form *nu-yr-* is used in some of the discussion
 21890 in this section), with the exception of the verb *stu* ‘believe’ whose applicative is
 21891 irregular.

21892 The allomorph *nu-* occurs in all other contexts. It is homophonous with the
 21893 autive ([§19.1](#)), the vertitive ([§19.2](#)) and various other prefixes, including the WEST-
 21894WARDS orientation preverbs ([§15.1.1.1](#)) and the denominal *nu-* ([§20.7](#)), but ambi-
 21895 guity is rare as these prefixes belong to different slots ([§11.2](#)).¹⁴

21896 17.4.3 Lexicalized applicatives

21897 Three of the applicative verbs in Table 17.10 are highly lexicalized and cannot be
 21898 considered to be synchronically analyzable as related to their base verbs.

21899 First, the transitive verb *nyk^hu* ‘invite’ (to one’s home as a guest, see examples
 21900 in [§24.2.2.2](#) and [§16.1.2.6](#)) originates from the applicative *nu-nyk^hu* of *ak^hu* ‘call’,
 21901 meaning ‘call (someone), shout at’. The verb *ak^hu* can select a locative goal (re-
 21902 ferring to the direction towards which one calls), as in (111), and its applicative
 21903 *nu-nyk^hu* presumably originally promoted this oblique argument to object status.

- 21904 (111) *k^ha nautcu c-to-k-nyk^hu-ci*
 house DEM:LOC TRAL-IFR-PEG-call-PEG

21905 ‘He went and called towards the house.’ (2011-05-nyima, 78)

21906 At that earlier stage, *nu-nyk^hu* probably used to have a meaning similar to that
 21907 of *nu-nyk^hr₂ŋga* ‘shout at’, the applicative of *ak^hr₂ŋga* ‘shout, call’ (a verb related to
 21908 and synonymous with *ak^hu* ‘call’). As shown by (112), the applicative *nyk^hr₂ŋga*
 21909 ‘shout at’ selects the goal/addressee as object (the plural marking on the verb
 21910 form which here indexes the object being due to the presence of the inverse
 21911 prefix, see 3'→3PL in [§14.3.2.2](#)).

¹³A similar allomorphy is found in other Gyalrong languages, see Sun (2006b) on Tshobdun.

¹⁴For an example of partial ambiguity between autive and applicative, see examples (113) and (114) in [§17.4.3](#).

- 21912 (112) *tc^heme u-skvt kuu-snur~sna ci kuu zo*
 girl 3SG.POSS-voice SBJ:PCP-EMPH~nice INDEF ERG EMPH
 21913 *tú-wy-nuu-yrk^hyzŋga-nuu ntsui.*
 IPFV-INV-APPL-call-PL always
 21914 ‘A girl who had a beautiful voice was calling them.’ (2003kandZislama, 9)

21915 The applicative *nu-yrk^hu* however underwent the semantic change ‘call *X*’ ⇒
 21916 ‘call *X_i* to invite him/her_i to come as guest’ ⇒ ‘invite *X* to come as guest’, so that
 21917 its etymological relationship with its base verb *ak^hu* ‘call’ is not synchronically
 21918 obvious anymore.

21919 Second, *nurjke* ‘look for’ is formally an applicative of the atelic motion verb
 21920 *ŋke* ‘walk’ (§15.1.2.1). The promoted object corresponds to the aim of the motion
 21921 (the entity that the subject is searching), as in (113).

- 21922 (113) *ji-<baogao> ty-lst, <piaozi> c-ty-nurjke, <dianzhan>*
 1PL.POSS-report IMP-release money TRAL-IMP-look.for electric.station
 21923 *βzu-j ηu*
 make:FACT-1PL be:FACT
 21924 ‘Make a report for us, go and look for money, and we will build an
 21925 electric station.’ (2010-09, 169)

21926 This verb should not be confused with the regular autive *nu-ŋke* of the verb
 21927 *ŋke* ‘walk’, which is intransitive, as shown by the generic *kuu-* in (114) (§14.2.1.2).

- 21928 (114) *tui-ji u-ŋgwu aþyndtundyt tu-kuu-nuu-ŋke*
 INDEF.POSS-field 3SG.POSS-in everywhere IPFV-GENR:S/O-AUTO-walk
 21929 *k^hu tce*
 be.possible:FACT LNK
 21930 ‘One can walk (on this path) everywhere in the fields (as one wishes).’
 21931 (15-06-05)

21932 Third, the transitive verb *nymdzuu* ‘look after’ historically derives from the in-
 21933 transitive *amdzuu* ‘sit’ by the applicative derivation. Its original meaning probably
 21934 was ‘sit by’, with a locative adjunct promoted to object status, but in Japhug it
 21935 rather means ‘stay near *X* and look after *X*’ without necessary implication of
 21936 remaining seated, as in (115).

17 Valency-increasing derivations

- 21937 (115) *ty-lu konyla zo kú-wy-nymdzur nuu-ra*
INDEF.POSS-milk completely EMPH IPFV-INV-look.after SENS-be.needed
21938 *ma blywur zo tu-mbus nuu-ŋu*
LNK immediately EMPH IPFV-spill.out SENS-be
21939 ‘One has to look after the milk (in the pan), otherwise it will spill out as
21940 soon as (it boils).’ (elicited)

21941 17.4.4 Applicatives and other derivations

21942 The applicative derivation cannot take any other derived verb form as input. The
21943 only partial exception is the applicative *nrzužu* ‘wrestle with’, whose base form
21944 *azuzu* ‘wrestle’ historically was a reciprocal verb (§18.4.1.3), but since it is an al-
21945 ready fossilized reciprocal, it does not demonstrate the ability of the applicative
21946 to apply to reciprocal forms in general.

21947 On the other hand, applicative verb forms can be subjected to further deriva-
21948 tions, including the reflexive *zyr-* (*zyr-nr-stu* REFL-APPL-believe ‘believe in one-
21949 self’, see example 72, §18.3.6) and the sigmatic causative (116).¹⁵

- 21950 (116) *turme ra, zimkʰym zo, nuu-z-nuu-sŋom-a-nuu cʰa-a*
people PL many EMPH IPFV-CAUS-APPL-envy-1SG-PL can:FACT-1SG
21951 ‘I will be able to make a lot of people envy (me for my dress).’ (jinai de
21952 guniang-zh, 22)

21953 The problematic verb *nuzduy* ‘worry about’ (§17.4.1.5) can in addition serve as
21954 input to the proprietive derivation (§18.8.6).

21955 17.5 Tropative

21956 The tropative¹⁶ *nr-* prefix is a valency-increasing derivation creating a transitive
21957 verb meaning ‘find/consider to be X’ out of an intransitive stative verb.¹⁷

21958 The tropative resembles the causative derivations in that the subject of the
21959 base verb becomes the object of the derived verb, and the added argument is
21960 the transitive subject (unlike the applicative). However, the semantic role of the
21961 transitive subject is not an agent (causer), but an experiencer.

¹⁵In this example, the 1sg is both causer (indexed as transitive subject) and patient, while the causee (‘the people’) is indexed as object.

¹⁶This term is taken from Arabic linguistics, see for instance Larcher (1996). Another possible term for this derivation would be ‘estimative’.

¹⁷Cognate prefixes are found in other Gyalrong languages, (Sun 2006b: 5–6, Jacques 2013a).

21962 For instance, the tropative of the stative verb *mpçyr* ‘be beautiful’ is the transitive *nrympçyr* ‘find beautiful’, whose object is the entity considered to be beautiful
 21963 (içq^ha tc^heme ‘the girl’ in 117), and whose transitive subject in the ergative is the
 21964 person feeling the beauty of the object (*tṣru u-tc̄w* ‘the prince’ in 117).

- 21966 (117) *tce nuu tṣru u-tc̄w nuu kuu nucimama zo*
 LNK DEM chieftain 3SG.POSS-son DEM ERG immediately EMPH
 21967 *icq^ha tc^heme nuu ny-ny-mpçyr, tce*
 the.mentioned girl DEM IFR-TROP-be.beautiful LNK
 21968 *ny-ny-pe.*
 IFR-TROP-be.good

21969 ‘The prince immediately found the girl very beautiful and fell in love
 21970 with her.’ (140518 huifei de muma-zh, 53-54)

21971 The tropative derivation is extremely productive, and Table 17.11 illustrates a
 21972 few representative examples.

Table 17.11: Examples of the *ny-* tropative derivation

basic verb	derived verb
<i>rtaꝝ</i> ‘be enough’	<i>nyrtatꝝ</i> ‘find sufficient’
<i>wxti</i> ‘be big’	<i>nywxti</i> ‘find big’
<i>zri</i> ‘be long’	<i>nyzri</i> ‘find long’
<i>pe</i> ‘be good’	<i>nype</i> ‘consider to be good, love’
<i>mnym</i> ‘smell’ (vi)	<i>nymnym</i> ‘smell’ (vt)
<i>c^hi</i> ‘be sweet’	<i>nyxc^hi</i> ‘find sweet’
<i>maꝝ</i> ‘not be’	<i>nyymaꝝ</i> ‘consider wrong’
<i>mbat</i> ‘be easy’	<i>nyymbat</i> ‘finish easily’

21973 The semantics of the derived verb is not always simply ‘consider/find *X*’. In
 21974 the case of stative verbs whose meaning is neutral (not explicitly positive like
 21975 ‘beautiful’), the tropative often has the additional meaning ‘find too *X*’, as in
 21976 (118) for instance.

- 21977 (118) *ny-sytc^ha uu-nuu-tur-ny-xtci ny, azo a-βlu ci*
 21978 2SG.POSS-place QU-SENS-2-TROP-be.small ADD 1SG 1SG.POSS-trick INDEF
 tu tce,
 exist:FACT LNK
 21979 ‘If you find your place too small for you, I have an idea.’ (150829 taishan

21980 zhi zhu-zh,203)

21981 The tropative *ny-* cannot be prefixed to non-adjectival stative verbs like copulas (*yu* ‘be’, *cti* ‘be’) or existential verbs (*tu* ‘exist’, *me* ‘not exist’). A meaning such
 21982 as ‘consider X to be Y’, where both X and Y are nouns, cannot be expressed in
 21983 Japhug using a tropative derivation (forms such as $\dagger ny-yu$ or $\dagger ny-tu$ are utterly
 21984 incorrect), and a synthetic construction must be used instead (§24.5.1.2).

21985 An apparent exception could seem to be *nyymaš* ‘consider wrong’ from the
 21986 negative copula *maš* ‘not be’. However, this verb never means ‘consider X not to
 21987 be Y’, and it seems that one of the original meanings of /*maš*/ was ‘not to be right’,
 21988 as shown by a lexicalized form such as the fossilized participle *kumam* ‘bad thing’
 21989 (from ‘(something) which is not right’, §16.1.1.7). In this example the tropative
 21990 preserved the original meaning of the verb, while the base verb underwent an
 21991 independent semantic change (already at the common Gyalrong stage).

21992 The ability to undergo tropativization is thus a criterion for identifying a sub-
 21993 class of adjectives among stative verbs (with the exception of some derived ad-
 21994 jectives, which are not compatible with the tropative possibly for morphological
 21995 reasons, §17.5.4).

21997 17.5.1 Allomorphy

21998 As shown by Table 17.11, aside from the regular *ny-* allomorph, a few verbs select
 21999 a *nyy-* / *nny-* allomorph. A similar allomorphy is observed on the sigmatic cau-
 22000 sative (§17.2.1.4) and the applicative (§17.4.2) prefixes. The *suu-* / *suy-* alternation
 22001 of the sigmatic causative is still productive: the latter allomorph occurs when
 22002 the original verb is intransitive, without an initial consonant cluster and without
 22003 initial velar or uvular. It is possible that a similar distribution used to exist at a
 22004 former stage for the *ny-* / *nyy-* allomorphs, but the data at hand do not permit a
 22005 firm conclusion.

22006 The *ny-* allomorph of the tropative is homophonous with that of the applicative
 22007 before *a-* contracting verbs (§12.3, §17.4.2), but there are no cases of forms that
 22008 are ambiguous between these two derivations.

22009 When two base verbs have stems that only differ in the presence vs. absence of
 22010 an *a-* prefixal element, their tropative form is identical. For instance, the stative
 22011 verbs *amtçor* ‘be pointy’ and *mtçor* ‘be sharp’ (§19.7.7) have the same tropative
 22012 *nyamtçor*, which can be interpreted as either ‘find pointy’ or ‘find sharp’.

22013 17.5.2 Past imperfective

22014 Tropative verbs stand out among transitive verbs in that they are compatible with
22015 Past Imperfective *pui-* and Inferential imperfective *pjyr-* forms as in (§119) (see also
22016 124c in §17.5.4 below), unlike most transitive verbs which require the progressive
22017 *asui-* to occur with these TAME prefixes (§21.5.3).

- | | | | | |
|-------|-------|---|-----------------------------|-------------|
| 22018 | (119) | <i>uu-tu-tu-tcur</i> | <i>mx-tc^hom</i> | <i>tce,</i> |
| | | 3SG.POSS-NMLZ:DEG-sour | NEG-be.exceedingly:FACT LNK | |
| 22019 | | <i>pú-wy-ny-mum</i> | <i>cti.</i> | |
| | | PST.IPFV-INV-TROP-be.tasty | be.AFF:FACT | |
| 22020 | | 'It is not too sour, and we used to find it tasty.' (17-ndZWnW, 57) | | |

The use of the Inferential or the Perfective with tropative verbs indicates a change of state. For instance, *to-ny-mum* IFR-TROP-be.tasty) means '(he used not to find it tasty, but now) he finds it tasty'.

22024 17.5.3 Lexicalized tropatives

Some tropative verbs have specialized meanings that are not completely predictable from the base verb. Thus, *nṛ-pe* (tropative of *pe* ‘be good’), in addition to its regular meaning ‘consider to be good’, can also be used in the sense of ‘love’, as in (117) above. The tropative of the modal auxiliary *nts^{hi}* ‘be better’ (§24.5.3.1), *nṛnts^{hi}*, also has this meaning (120).¹⁸

- 22030 (120) *azo a-nú-wy-nnts^{hi}-a ra*
 1SG IRR-PFV-INV-love-1SG be.needed:FACT
 22031 ‘(Aladin thought) ‘May the princess love me.’ (140511 alading-zh, 196)

22032 The transitive verb *n̥kʰe* ‘bully’ from *kʰe* ‘be stupid’, probably also used to
22033 be a tropative verb ‘consider to be stupid’, with a quite unpredictable semantic
22034 evolution.

22035 The perception verb *nymnym* ‘smell’ (vt) is formally a tropative derived from
22036 the intransitive *mnym* ‘smell’ (vi), a verb that can only take nouns meaning ‘smell’
22037 (such as the inalienably possessed noun *tx-di* ‘smell’) as subject, as shown by (121).

¹⁸Since the etymological relationship between the base verb *nts^{hi}* ‘be better’ and *nrvnts^{hi}* ‘love’ is not synchronically transparent, the *nrv-* is not analyzed as a prefix in the glosses.

- 22038 (121) *nunu cry nuu wuma zo pe, tce pjú-wy-blur tce*
DEM juniper DEM really EMPH be.good:FACT LNK IPFV-INV-burn LNK
22039 *uu-di wuma mnym*
3SG.POSS-smell really have.a.smell:FACT
22040 ‘The juniper is very nice, when one burns it it has a strong smell.’
22041 (08-CAG, 24-25)

22042 The tropative *nymnym* can take as object a noun meaning ‘smell’, with the
22043 referent whose smell is perceived encoded as a possessive prefix on the object (for
22044 instance the 3PL prefix on the noun *nuu-di* ‘their smell’ in 122). However, unlike
22045 its base verb, *nymnym* can also directly select as object the referent whose smell
22046 is perceived, including even a first or second person as in (123).

- 22047 (122) *sruntp^hu nuu kuu, yotcu rxyz-i-nuu pjx-suχsrl matci, nuu-di*
râkshasa DEM ERG where stay:FACT-PL IFR-realize LNK 3PL.POSS-smell
22048 *tu-ny-mnym pjx-cti tce pjx-mts^hym.*
IPFV-TROP-have.a.smell IFR.IPFV-be.AFF LNK IFR-feel
22049 ‘The ogre realized where they where, as it was sniffing them out and
22050 perceived (their smell).’ (160706 poucet6, 53-54)
- 22051 (123) *jx-yi tce, pxjk^hu tu-ta-ny-mnym*
IMP-come LNK still IPFV:UP-1→2-TROP-have.a.smell
22052 ‘Come (here), I will smell you (to see if you have had alcohol).’ (140506
22053 loBzi, 11)

22054 Example (122) also shows that *nymnym* expresses volitional olfactory percep-
22055 tion (looking for something by paying attention to smell). Its non-volitional coun-
22056 terpart is *mts^hym* in the sense of ‘perceive (a smell) inadvertently; find (by smell)’.¹⁹

22057 17.5.4 Compatibility with other derivations

22058 In addition to underived stative verbs as in Table 17.11 above, the tropative deriva-
22059 tion can also take verbs with the proprietive *sy-* derivation (§18.8)

22060 One of the most common of such verbs is *nyssyctit* ‘find pleasant’ (of a place, a
22061 situation, an event) from the proprietive *syctit* ‘be pleasant’ (‘be such that people
22062 feel happy with/in it’) of the stative verb *scit* ‘be happy’. In the excerpt from a
22063 conversation in (124), we see that the tropative *muu-puu-ny-sy-scit-a* (124c) occurs
22064 in answer to a question with the proprietive verb *uu-pú-sy-scit* (124a).

¹⁹The verb *mts^hym* expresses non-visual non-volitional perception (§15.1.5.9), not only auditory
(in the meaning ‘hear’), but also olfactory as in (122).

- 22065 (124) a. (T) *atu tybab u-pút-sy-scit?* [...]
 up.there party QU-PST.IPFV-PROP-be.happy
 22066 ‘Was the party up there nice?’
- 22067 b. (L) *pui-sy-scit a-taB,*
 PST.IPFV-PROP-be.happy 1SG.POSS-MZ
 22068 *my-kui-sy-scit pui-me*
 NEG-SBJ:PCP-PROP-be.happy PST.IPFV-not.exist
 22069 ‘It was nice, mother-in-law, there was nothing that was not nice.’
- 22070 c. (A) *azo ndyre muu-puu-ny-sy-scit-a,*
 1SG LNK NEG-PST.IPFV-TROP-PROP-be.happy-1SG
 22071 *lo-nuitc^homba-a*
 IFR-have.a.cold-1SG
 22072 ‘As far as I am concerned, I did not find (that party) nice, I caught a cold.’ (TaRrdo2003)
- 22073

The antonym of *nysyrcit*, *nysyrduy* ‘find unpleasant’, is also the tropative of a proprietive verb *sryduy* ‘be unpleasant’ from the base verb *duy* ‘be upset’. Both *scit* and *duy* are Tibetan loanwords (from གྱିଦ ‘be happy’ and རୁଗ ‘suffer’, respectively), showing the productivity of this double derivation. While no other examples of this double derivation are found in the corpus, it is possible to elicit additional examples (§18.8.6).

- 22080 (125) *nunuu u-rme u-ŋguu ri ku-ce tce tcendyre*
 DEM 3SG.POSS-hair 2SG.POSS-in LOC IPFV:EAST-go LNK LNK
 22081 *ku-ce ny ku-ce tce tce u-ndzi u-ŋguu ri*
 IPFV:EAST-go ADD IPFV:EAST-go LNK LNK 3SG.POSS-skin 3SG.POSS-in LOC
 22082 *ku-otsa puu-ŋu. tce fsapab ra kuu nuu ny-sy-y-duy-nuu*
 IPFV-prick SENS-be LNK animal PL ERG DEM TROP-PROP-be.upset:FACT-PL
 22083 *ŋgryl ma*
 be.usually.the.case:FACT LNK
 22084 ‘(Its seeds) go into the hair (of the sheep), deeper and deeper and stick
 22085 into their skin, and the animals find this unpleasant.’ (19-khWlu, 107-109)

The tropative-proprietive verbs *nysyrcit* and *nysyrduy* take as transitive subject (with the ergative in 125) the experiencer (like the base verbs *scit* ‘be happy’ and *duy* ‘be upset’) and as object the stimulus (the situation or place causing the feeling, like the proprietive verbs *sryscit* ‘be pleasant’ and *sryduy* ‘be unpleasant’).

22090 The tropative is also attested with the subject-oriented facilitative *γγ-* (§18.9.1).
 22091 For instance, from *γγβzi* ‘become drunk easily’ (facilitative of *βzi* ‘be drunk’) one
 22092 can derive the tropative *nγγγβzi* ‘consider that *X* becomes drunk easily’ (126).

- 22093 (126) *nγzo ndyre pui-ta-nγ-γγ-βzi*
 2SG LNK SENS-1→2-TROP-FACIL-be.drunk
 22094 ‘You, I think that you are easily drunk.’ (elicited)

22095 Distributed property verbs such *amuzyut* ‘be evenly distributed’ (§18.7) can
 22096 undergo the tropative derivation (*nymuzyut* ‘consider that *X* is evenly distribu-
 22097 ted’, for instance about colours), though such uses are uncommon.

22098 The tropative cannot take as input any other type of derived stative verbs, such
 22099 as the passive (§18.1), and more surprisingly the *nuyu-* facilitative (§18.9.2).

22100 Tropative verbs can in their turn serve as input for other derivations, including
 22101 causative (§17.2.8), reflexive (§18.3.6) and reciprocal (§18.4.1.2). A related deriva-
 22102 tion whose meaning is close to that of a reflexivized tropative is the auto-evaluative
 22103 *zny-* (§19.5).

22104 17.5.5 Other tropative constructions

22105 Apart from the tropative *nγ-*, tropative meaning can be expressed in Japhug by
 22106 the sigmatic causative in a few cases (§17.2.5.9), the velar causative (§17.3.3.1) and
 22107 by periphrastic constructions (§24.5.1.2).

22108 Other derivations with a tropative meaning include the *rγ(y)-* prefix in *rγruy*
 22109 ‘cherish’ (from *ruy* ‘be precious’, §19.7.5), and the reflexive *zγγ-* of some intransi-
 22110 tive verbs (§18.3.1.4).

22111 18 Valency-decreasing derivations

22112 18.1 Passive

22113 The passive derivation is marked by the prefix *a-*, a formative also found in the
22114 reciprocal derivation (§18.4.1) and probably of denominal origin (§20.10.3). It de-
22115 rives an intransitive verb from a transitive one, whose intransitive subject corre-
22116 sponds to the object of the base verb (*trscoz* ‘letter’ in 1a and 1b).¹ The transitive
22117 subject cannot be expressed: passive verbs do not take overt agents.

- 22118 (1) a. *uizo kuu trscoz ryt*
3SG ERG letter write:FACT
22119 ‘S/he will write a/the letter.’ (elicited)
- 22120 b. *trscoz a-ryt*
letter PASS-write:FACT
22121 ‘The letter is written/has been written.’ (elicited)

22122 Like other verbs in *a-*, passive verbs present vowel contraction and insertion of
22123 the peg circumfix *k-...-ci* in Inferential forms (§21.5.2.1, §15.1.1.2), as in (2) (where
22124 it is realized as *-y-*, following the rule in §12.3). In the Kamnyu dialect, the peg
22125 circumfix, although originally a secondary marker, has almost become the main
22126 exponent of the passive in the Inferential tenses.

- 22127 (2) *kum pjy-st^ho^b ri, kum pjy-k-y-yrtuy-ci cti tce,*
door IFR-push LNK DEM IFR.IPFV-PEG-PASS-lock-PEG be:AFF:FACT LNK
22128 ‘He pushed the door, but the door was locked.’ (tWJo 2012, 22)

22129 Table 18.1 presents a few representative examples of passive verbs, including
22130 lexicalized ones whose meaning has become slightly shifted from that of the
22131 base verb (§18.1.2). The presence of Tibetan loanwords such as *rtsi* ‘count’ (from
22132 藏语 *rtsi* ‘count’) among the base verbs shows that the passive derivation is still
22133 productive.

¹The derivation also affects the dynamicity of the verb and the TAME (§18.1.1).

Table 18.1: Examples of the passive *a-* prefix

Base verb	Derived verb
<i>mpʰur</i> ‘wrap’	<i>ampʰur</i> ‘be wrapped’
<i>βraꝝ</i> ‘attach to’	<i>aβraꝝ</i> ‘be attached to’
<i>rtsi</i> ‘count’	<i>artsi</i> ‘be counted as’
<i>jyɔꝝ</i> ‘paste’	<i>ajyɔꝝ</i> ‘be glued’
<i>tsʰoꝝ</i> ‘attach’	<i>atsʰoꝝ</i> ‘be attached’
<i>sti</i> ‘block’	<i>asti</i> ‘be blocked’
<i>pa</i> ‘do’	<i>apa</i> ‘become’
<i>βzu</i> ‘make’	<i>aβzu</i> ‘become, grow’
<i>ta</i> ‘put’	<i>ata</i> ‘be on’
<i>rku</i> ‘put in’	<i>arku</i> ‘be in’

The passive derivation only removes transitive subjects, and passivized verbs preserve oblique arguments or adjuncts. For instance, like the verb *βraꝝ* ‘attach’, which includes a locative argument in its argument structure, the passive form *aβraꝝ* ‘be attached’ also selects a locative phrase, with a locative case as in (3) or in absolute form as in (4).

- (3) *stuxsi yuu u-χcyl ri xturkui a-βraꝝ*,
 double.yoke GEN 3SG.POSS-middle LOC hide.ripe PASS-attach:FACT
 ‘The hide rope (connecting the yoke to the plough) is attached in the middle of the double yoke.’ (24-mbGo, 107)

- (4) *tʂ-mu nuz yuu u-tcuu nuz kum-qʰu*
 INDEF.POSS-mother DEM GEN 3SG.POSS-son DEM door-back
pjy-k-ʂ-βraꝝ-ci tce,
 IPFV-PEG-PASS-attach-PEG LNK
 ‘The old woman’s son was attached on the back of the door.’ (tWJo 2012, 63)

The passive derivation also applies to some noun-verb collocations. For instance, in (5), passivized verb *a-lvt*, meaning ‘be locked’ in collocation with the noun *srvu* ‘key’, has a meaning directly derived from that of the collocation of *srvu* with the base verb *lvt* ‘release’, which means ‘lock (the door)’ (§16.1.3.10). The noun *srvu* ‘key’ is a semi-object (§8.1.5) in this collocation. The intransitive subject of (*srvu*) *a-lvt* ‘be locked’ in (5) is *kum* ‘door’.

- 22152 (5) *kum syctu my-a-lvt*
 door key NEG-PASS-release:FACT
 22153 ‘The door is not locked/has not been locked.’ (140428 xiaohongmao-zh, 77)

22154 Passive verb forms are almost never attested in first or second person forms,
 22155 except for the highly lexicalized passives *apa* ‘become’ and *aβzu* ‘become, grow’
 22156 (§18.1.2). Example (6) with *arku* ‘be in’² shows that there is not absolute con-
 22157 straints against first or second person indexation on passive verbs.

- 22158 (6) *nunua p^hoŋ u-ŋguu nutcu pu-a-rku-a*
 DEM bottle 3SG.POSS-in DEM:LOC PST.IPFV-PASS-put.in-1SG
 22159 ‘(You don’t believe that) I had been put inside this bottle.’ (140512 yufu yu
 22160 mogui-zh, 119)

22161 The historical hypothesis in (§14.8.3) proposes that the 1→2 portmanteau pre-
 22162 fix *ta-* originates from the fusion of the passive *a-* with the second person *tu-*
 22163 prefix indexing the object. If correct, this scenario implies that first or second per-
 22164 son indexation on passive verbs may have been more common in proto-Gyalrong
 22165 than in Japhug.

22166 18.1.1 The interaction of the Passive derivation with Dynamicity and 22167 TAME

22168 With the exception of *apa* ‘become’ and *aβzu* ‘become, grow’ (§18.1.2), passive
 22169 verbs express resultative states. They are mainly attested in the Past Imperfective
 22170 (6) and in the Inferential Imperfective (4, see also 16 in §18.1.3). In combination
 22171 with the Factual Non-Past the passive means ‘X has already been Yed’ or ‘X is
 22172 Yed’ (where X represents the object of the base verb Y) as in (7) (see also 1b and
 22173 5 above).

- 22174 (7) *jaŋm^yzdoŋzdoŋ nuu kūn^y pya ŋu, my-a-rvt*
 bird.sp. DEM also bird be:FACT NEG-PASS-write:FACT
 22175 ‘The *jaŋm^yzdoŋzdoŋ* is also a bird, it is not written (in the list of bird’s
 22176 names that had been prepared beforehand to ask about all known bird
 22177 species).’ (23-RmWrcWftsa, 86)

22178 Examples of passive verbs in Perfective or Inferential forms are very rare. In
 22179 (8), the form *ko-k-ŋyɔŋ-ci* can only be interpreted as the Inferential of the passive

²Although this passive verb is used as a semi-lexicalized existential verb (§18.1.2), in this particular context it can be interpreted as expressing a resultative state with a definite agent.

22180 of *njɔr* ‘paste’, with a meaning ‘(the spit) got glued (on her)’ that does not seem
 22181 interpretable as resultative.

22182 (8) *tcelo* *kutcu* *a-mci* *ci*
 upstream DEM.PROX:LOC 1SG.POSS-saliva once
 22183 *s-c^hur-βde-a*, *nui cua yuu ndzi-taꝝ*
 TRAL-IPFV:DOWNTREAM-throw-1SG, DEM who GEN 2DU.POSS-on
 22184 *ky-kui-γ-njɔr* *nui a-rzaβ* *a-pui-tui-ŋu-ndzi to-ti ri*
 AOR-SBJ:PCP-PASS-glue DEM 1SG.POSS-wife IRR-IPFV-2-be-DU IFR-say LNK
 22185 [...] *tce ci s-c^ho-βde* *ri, rŋuiłysmyň u-taꝝ*
 LNK once TRAL-IFR:DOWNTREAM-throw LNK ANTHR 3SG.POSS-on
 22186 *ko-k-γ-njɔr-ci* *cti* *ri, jaŋmyc^huŋqa kui ny-nui-pciz*
 IFR-PEG-PASS-glue-PEG be.AFF:FACT LNK ANTHR ERG IFR-AUTO-wipe
 22187 *q^he uzo u-taꝝ* *ko-nui-njɔr*.
 LNK 3SG 3SG.POSS-on IFR-AUTO-glue
 22188 ‘He said ‘I will spit from here, and whoever of you two gets glued by my
 22189 spit will be my wife.’ He spat, and although (his spit) got glued on
 22190 Rngulasman, Yagmakhyiqa wiped it off and pasted it onto herself.’
 22191 (2003-kWBra, 48-50)

22192 The participle /k^hkyŋŋjɔr/ in this example could in principle either be parsed
 22193 as a an perfective object participle *ky-kr-njɔr* (AOR-OBJ:PCP-glue) or perfective
 22194 subject passive participle *ky-kui-γ-njɔr* (AOR-SBJ:PCP-PASS-glue), but only the se-
 22195 cond option is likely, due to the fact that the gluing action is spontaneous and
 22196 lacks an agent.³ The fact that *njɔr* ‘paste’ lacks an anticausative (§18.5) and that
 22197 the passive form *aŋjɔr* is used with an anticausative-like meaning (§18.1.3) may
 22198 explain why the perfective forms are possible with this verb.

22199 18.1.2 Lexicalized passives

22200 The verbs *pa* ‘do’ (§22.4.2.5) and *βzu* ‘make’ (§22.4.2.1) have lexicalized passive
 22201 forms that are used as quasi-copulas *apa* ‘become’ and *aβzu* ‘become, grow’ taking
 22202 a semi-object serving as nominal predicate (§22.5.1.1), for instance *t^hi* ‘what’ in
 22203 (9) or *turme* (*ci*) ‘a human’ in (10) (for additional examples, see 31 in §9.1.2, 7 and
 22204 8 in §15.1.1.2). In addition, *aβzu* is also used as a plain intransitive verb meaning
 22205 ‘grow’.

³Note in addition that the relativized element is the referent marked with the oblique relator noun *u-taꝝ* ‘on, above’ (§8.3.4.3).

- 22206 (9) *nvzo tc^hi a-nuu-tur-βzu ra?*
 2SG what IRR-PFV-2-become be.needed:FACT
 22207 ‘What do you (want to) become?’ (2003kandZislama, 36)
- 22208 (10) *turme ci a-nuu-χpa-a kuu, turme nuu-χβzu-a ci*
 human INDEF IRR-PFV-become-1SG SFP human IPFV-become-1SG a.little
 22209 *a-puu-k^huu kuu*
 IRR-IPFV-be.possible SFP
 22210 ‘If only I could become a human!’ (150819 haidenver-zh, 242)

22211 In the perfective, the third person forms of *qβzu* ‘become, grow’ have an identi-
 22212 cal surface form with those of the transitive *βzu* ‘make’: for instance /naβzu/ can
 22213 be either parsed as *nua-βzu* (AOR-become) or as *na-βzu* (AOR:3→3'-make). Since
 22214 the transitive *βzu* has dummy subject functions (§14.3.5), in examples such as (11),
 22215 it is possible to analyze the form /t^haβzu/ as t^ha-βzu (AOR:3→3'-make) instead.

- 22216 (11) *ui-mat t^hui-aβzu tce tce*
 3SG.POSS-fruit AOR-grow LNK LNK
 22217 ‘When its fruits grow...’ (06-zrantcu; 25)

22218 The verbs *ta* ‘put’ and *rku* ‘put in’ have passive forms whose meaning is still
 22219 predictable from the base verb, *ata* ‘be on’ and *arku* ‘be in’. However, these passive
 22220 forms generally serve as existential verbs (§22.5.1.2) as in (12) and (13), without
 22221 the implication that the state results from a manipulative action. While in (12)
 22222 one could argue that an alternative translation such as ‘a saddle has been put
 22223 there’ would be possible,⁴ in the case of (13) it is obvious the presence of a sweet
 22224 substance inside of a plant leaf is not attributable to an external agent.

- 22225 (12) *ui-rkuu nutcu si ui-sno ci a-ta tce,*
 3SG.POSS-side DEM:LOC wood 3SG.POSS-saddle INDEF PASS-put:FACT LNK
 22226 ‘Next to (the horse), there is a wooden saddle.’ (2012 qachGa, 51)

⁴In this example, the Factual actually can be construed as having a future interpretation (§21.3.1.2): a character describes to another character what he will see when he arrives at a place. I translate here *a-ta* as ‘there is’ in the present tense rather than ‘there will be’ because at the time of utterance, the wooden saddle is already placed next to the horse, and there is no implication that a change of state will occur.

- 22227 (13) *nua u-ŋgwu nur ku-c^{hi} yzzgga kui-fse*
DEM 3SG.POSS-in DEM SBJ:PCP-be.sweet honey SBJ:PCP-be.like
22228 *a-rku tce*
PASS-put.in:FACT LNK
22229 ‘(When one presses on the flower of the *Habenaria glaucifolia*), inside of
22230 it there is something sweet like honey.’ (16-CWrNgo, 204)

22231 A piece of evidence suggesting that the verbs *ata* ‘be on’ and *arku* ‘be in’ are
22232 in the process of becoming specialized existential verbs (§22.5.1.2) is the fact that
22233 they alternate with the suppletive Sensory forms of the existential verbs (*yzzu*
22234 ‘exist’ and *maje* ‘not exist’, §14.2.2), as in (14).

- 22235 (14) *nutcu pu-a-ta ri maje*
DEM:LOC PST.IPFV-PASS-put LNK not.exist:SENS
22236 ‘(The meat) used to be there, but now it is not there (any more).’
22237 (meimeidegushi, 74)

22238 However, unlike the existential verbs *tu* ‘exist’ and *me* ‘not exist’, both *ata* ‘be
22239 on’ and *arku* ‘be in’ have regular sensory forms, as in (15).

- 22240 (15) *sytch'a u-ŋgwu nutcu rŋwul tui-tangor pu-γ-rku tce,*
ground 3SG.POSS-in DEM:LOC silver one-basket SENS-PASS-put.in LNK
22241 ‘Inside the ground, there is a basketful of silver.’ (2003 tamukatsa, 67)

22242 18.1.3 Agent demotion

22243 The *a-* derivation demotes the transitive subject, and the agent is not expressible
22244 in the same clause. However, the agent is not necessarily semantically deleted by
22245 the passive derivation. In (16) for instance, the agent of the wrapping action is
22246 clear from the context both to the narrator of the story and to the person dis-
22247 covering the silver ingots inside the pieces of bread – it is therefore semantically
22248 recoverable.

- 22249 (16) *u-ŋgwu nutcu rŋwul q^hoŋq^hor tui-rdor*
3SG.POSS-in DEM:LOC silver ingot one-piece
22250 *pjy-k-γ-mp^huir-ci,*
IFR.IPFV-PEG-PASS-wrap-PEG
22251 ‘A silver ingot had been wrapped inside.’ (qajdoskAt 2002, 112)

Many of the verbs that have an anticausative form (built by prenasalizing the onset, see Tables 18.4 and 18.5, §18.5 below) also have a passive. The passive is required in these cases when the agent is implicit and recoverable (for instance, *aprvt* ‘have been broken’ from *prvt* ‘break’ (vt), example 102 in §18.5.2), while the anticausative is selected when the action occurs spontaneously without external agent (*mbrvt* ‘break’ (vi), example 103 in §18.5.2).

In some contexts, both passive and anticausative forms are possible. For instance, to express the fact that a piece of iron is attached to an object, both the passive *ats^hor* ‘be attached’ (17) and the anticausative *ndzor* ‘be attached’ (18) (from *ts^hor* ‘attach’) are attested.

- (17) *uu-pa, tc^huŋk^hyr yu u-spjuŋ tu-kui-yi*
 3SG.POSS-down water.wheel GEN 3SG.POSS-axle IPFV:UP-SBJ:PCP-come
nunure ri li com a-ts^hor tce
 DEM:LOC LOC again iron PASS-attach:FACT LNK
 ‘On the (top extremity of) the axle of the mill coming up from below, a
 piece of iron is attached.’ (06-BGa, 66-67)

- (18) *nuu uu-t^hycu ri com kui-ndzor ci*
 DEM 3SG.POSS-downstream LOC iron SBJ:PCP-ACAUS:attach INDEF
tu tce, nuu t^haŋmu rmi.
 exist:FACT LNK DEM weaving.blade call:FACT
 ‘Below, there is (a weaving implement) that has a piece of iron attached
 to it, it is called *t^haŋmu*.’ (thaXtsa 2002, 63)

The anticausative *ndzor* ‘be attached’ is required in cases when the entity that is attached on a surface has grown on it, rather than having been attached by someone, as in (19). In this function, it can be considered to be a subtype of existential verb (§22.5.1.2).

- (19) *uu-muntoŋ nuu kuny c^huu-ŋzirja tce tui-k^hyl*
 3SG.POSS-flower DEM also IPFV:DOWNSTREAM-be-aligned LNK one-place
nuutcu ʂnuuz, ʐsum kuβde jamar ku-ndzor.
 DEM:LOC two three four about IPFV-ACAUS:attach
 ‘Its flowers are also aligned, in each place they are attached in (groups) of
 about two, three or four.’ (16-RlWmsWsi, 8-9)

Another difference between *ndzor* ‘be attached’ and *ats^hor* ‘be attached’ is that the former only occurs as a resultative (like most passive verbs in Japhug, see

22280 §18.1.1), while *ndzor* ‘be attached’ can also mean ‘cling onto, lean on, grab’ as in
 22281 (119) (§18.5.5).

22282 In the case of verbs lacking an anticausative form however, such as *pjor* ‘paste’,
 22283 the passive forms can be used with an anticausative function, with a semantically
 22284 deleted agent, as shown by examples such as (8) in §18.1.1.

22285 Passive verbs are as a rule incompatible with an overt agent, even when se-
 22286 mantically recoverable. Other morphosyntactic devices such as a direct-inverse
 22287 marking are used to express the relative saliency of the agent and the patient in
 22288 Japhug (see the discussion in §14.3.3).

22289 In example (20) with a passive verb, the ergative postpositional phrase *tx-se*
 22290 *kui* could appear to be an example of overt agent.⁵ However, note that the base
 22291 verb *mar* ‘smear’ can encode the material used to smear a surface as a semi-object
 22292 (*taqfaz* ‘soot’ in 21) rather than as an instrument. Likewise, the ergative is optional
 22293 on *tx-se* ‘blood’ (compare with 22).

- 22294 (20) *xciri yuu ui-mtc^{hi}* *ra [tx-se]* *kui]*
 weasel GEN 3SG.POSS-mouth PL INDEF.POSS-blood ERG
 22295 *pjx-k-y-mar-ci* *zo*
 IFR.IPFV-PEG-PASS-smear-PEG EMPH
 22296 ‘The weasel’s mouth was smeared with blood.’ (140518 xuezhe he
 22297 huangshulang-zh, 24)

- 22298 (21) *tc^heme nuu kui [...] ui-rja* *taqfaz to-mar*
 girl DEM ERG 3SG.POSS-face soot IFR-smear
 22299 ‘The lady smeared her face with soot.’ (2002 qaCpa, 267)

- 22300 (22) *ui-mtc^{hi}* *ui-ta^b* *tce tx-se* *ra*
 3SG.POSS-mouth 3SG.POSS-on LOC INDEF.POSS-blood PL
 22301 *pjx-k-y-mar-ci* *zo.*
 IFR.IPFV-PEG-PASS-smear-PEG EMPH
 22302 ‘Its mouth was smeared with blood.’ (140518 xuezhe he huangshulang-zh,
 22303 19)

22304 The apparently puzzling optional use of the ergative in (20) is in fact the same
 22305 as that observed with the partitive argument of the verb *mts^hyt* ‘be full’ (§8.2.2.9),
 22306 and has to be distinguished from either agent or instrument.

⁵In the Chinese original from which this story is translated, the corresponding passage is 满嘴
 鲜血 <mǎnzuǐ xiānxuè> ‘the mouth covered in blood’; the presence of ergative in (20) cannot
 be explained as calquing from Chinese.

22307 The agent can at best be expressed as a possessive prefix on the intransitive
 22308 subject of the passive verb, as in (23), though in this example the implication that
 22309 the agent is 2SG is only contextual.

- 22310 (23) *ny-smyn u-j-á-ndza?*
 22311 2SG.POSS-medicine QU-PEG-PASS-eat:FACT
 'Has your medicine been eaten?' (elicited)

22312 The only case of a passive verb taking as argument an overt noun phrase cor-
 22313 responding to the transitive subject of the base verb is *afskyr* 'be surrounded'
 22314 from *fskrr* 'go around'. As shown in (24) and (25), an absolute locative noun
 22315 phrase referring to the surrounding entity (in square brackets) can appear with
 22316 this verb after the intransitive subject (the surrounded entity/location).

- 22317 (24) *izyra ji-kʰa nuu [jyyt tui-txkʰryz nuu]*
 22318 1PL 1PL.POSS-house DEM balcony one-row DEM
 ku-o-fskyr.
 IPFV:EAST-PASS-surround
 22319 'Our house is surrounded by one row of balcony.' (2011-11-kha2, 4)

- 22320 (25) *a-kʰa u-rkuu numuu [tui-ji]*
 22321 1SG.POSS-house 3SG.POSS-side DEM INDEF.POSS-field
 a-fskyr.
 PASS-surround:FACT
 22322 '(The sides of) my house are surrounded by fields.' (elicited)

22323 However, the base verb *fskrr* 'go around' in the meaning 'surround' can be con-
 22324 structed with the surrounding entity as its transitive subject (in 26, *praz* 'cliff').
 22325 This ergatively-marked subject however is not a volitional agent and rather se-
 22326 manticly corresponds to a locative argument, which may explain why it is not
 22327 removed by passivization (though ergative marking is lost).

- 22328 (26) *kuuki sxtcʰa ki, u-rkuu tʰamtçyt [praz] kuu*
 22329 DEM.PROX place DEM.PROX 3SG.POSS-side all cliff ERG
 ku-fskyr juu-cti
 IPFV:EAST-surround SENS-be.AFF
 22330 '(The sides of) this place are all surrounded by cliffs.' (elicited)

18.1.4 Passive from ditransitive verbs

Secundative verbs such as *mbi* ‘give’ and *jts^{hi}* ‘give to drink’ (a lexicalized causative of *ts^{hi}* ‘drink’), which select as object the recipient rather than the theme (§14.4.2), can be subjected to the passive derivation. The resulting verbs *ambi* ‘be given’ and *a{jts^{hi}* ‘be given to drink’ however encode as subjects not the recipient, but the theme; in particular, they never take indexation affixes even when the recipient is a first or second person. The recipient can only be encoded as possessor of the subject (27) or as left-dislocated focus constituent (28).

- (27) *ty-pytso* *wi-smyn* *a-mbi*
 INDEF.POSS-child 3SG.POSS-medicine PASS-give:FACT
 ‘The child has been given his medicine.’ (elicited)

- (28) *ty-pytso* *ra ty-lu* *a-jts^{hi}*
 INDEF.POSS-child PL INDEF.POSS-milk PASS-give.to.drink:FACT
 ‘The children have been given milk to drink.’ (elicited)

The causativization of these passive verbs yields the rogative derivation (§18.2).

18.1.5 Reduplicated passive

The intransitive verb *aβzdoββzdu* ‘be in good order’ derives from the transitive verb *βzdu* ‘collect’ (itself borrowed from *bsdu* ‘collect’), and can be interpreted as a lexicalized passive derivation (‘have been collected and put in order’ → ‘be in good order’). However, unlike other passive verbs, it presents reduplication with the rare *-oβ* replicant (on this type of reduplication, see also §19.4.2.2).

The verb *aβdoββdi* ‘be in good health’ (29) apparently has the same morphological structure as *aβzdoββzdu* ‘be in good order’, but since its base verb *βdi* ‘be well’ (from *bde* ‘be well’) is stative intransitive, this example cannot be analyzed as a passive.

- (29) *izora cxyco* *ku-oβdoββdi-j*
 1PL these.days PRS-be.in.good.health-1PL
 ‘These days we are in good health.’ (elicited)

Another interesting difference between *aβzdoββzdu* ‘be in good order’ and *aβdoββdi* ‘be in good health’ is that the former has a sigmatic causative *sxβzdoββzdu* ‘put in order’, while the latter has a velar causative *yvβdoββdi* ‘tidy up, put in order’ whose meaning is not derivable from that of *aβdoββdi* ‘be in good health’.

18.1.6 Compatibility with other derivations

There are no examples in the corpus of passive derivations taking as input causative or applicative verbs, except for some lexicalized causatives such as *jtsʰi* ‘give to drink’ (§18.1.4). However, it is likely that the progressive prefix *asu-* originates from the combination of the passive and the sigmatic causative (§17.2.8, §21.6.1.3).

Passive verbs however can be subjected to sigmatic causative derivation. The fusion of the sigmatic causative *su-* with the passive *a-* yield /sv/, a surface form identical to the antipassive (§18.6.2) and the proprietive (§18.8) prefixes.

First, the causative-passive double derivations from secundative verbs (§18.1.4) has become the rogative derivation (§18.2). Second, the lexicalized passives *apa* ‘become’ and *aβzu* ‘become, grow’ (§18.1.2) have the causative forms *sypa* and *syβzu*, both of which predictably mean ‘cause to become, turn into, transform into’. These causative verbs are ditransitive, as in (30), taking as semi-object the entity in which the object is transformed.

- (30) *tua-ci t^hamt_{cxt} tx-se suu-ypa-j*
 INDEF.POSS-water all INDEF.POSS-blood CAUS-become:FACT-1SG
 ‘Let us turn all the water into blood.’ (2003smanmi, 91)

The object indexed on the verb is the entity that undergoes transformation, such as the 1PL in (31), not the one that it is transformed into. Only the object is targeted by reflexivization (§18.3.4).

- (31) *kuki ji-βdaεmu kuu ki kui-fse, nyki, sunγw*
DEM.PROX 1PL.POSS-queen ERG DEM.PROX SBJ:PCP-be.like FILLER forest
pya núa-wy-su-γβzu-j
bird AOR-INV-CAUS-become-1PL
‘Our queen has transformed us into bird from the forest.’ (140520 ye
tiane-zh, 127)

The verbs *sypa* and *sypzu* ‘cause to become, turn into, transform’ occur with a variety of semi-objects. In (32), the semi-object *tui-mpçar tui-mpçar* is a repeated counted noun (§7.3.2.3) expressing literally the meaning ‘turn (the rock) into sheets one by one’.

- (32) *tce nui tu-mpcar tu-mpcar jnú-wy-sui-χbz* *jnui-ra*
 LNK DEM one-sheet one-sheet IPFV-INV-CAUS-become SENS-be.needed
 '(To extract stone slabs), one has to chop (the rocks) sheet by sheet (layer
 by layer).' (14-siblings, 173-175)

The semi-object of *sypa* and *syβzu* ‘cause to become’ can also be an infinitival or participial clause. This combination is a common type of periphrastic causative construction (§24.5.1.1), illustrated in example (33) with the two relative clauses *wi-γya kui-xtciu~xtci* ‘who is young, whose age is small’ and *kui-mpcui~mpcyr* ‘who is beautiful’ as semi objects. A more literal translation could be ‘he turned his mother into (someone) whose age was small and who was beautiful’.

- (33) *wi-mu* [*wi-γya* *kui-xtciu~xtci*]
 3SG.POSS-mother 3SG.POSS-age SBJ:PCP-EMPH~be.small
[kui-mpcui~mpcyr] *zo* *na-swi-γβzu* *jnu-ηu.*
 SBJ:PCP-EMPH~be.beautiful EMPH AOR:3→3'-CAUS-become SENS-be
 ‘He made his mother become young and beautiful.’ (Norbzang 2005, 253)

This periphrastic construction is also possible with the reflexivized forms of *sypa* ‘transform’ and *syβzu* ‘transform’ (example 68, §18.3.4)

The verb *syrtsi* ‘consider as’ (see 23, §8.1.7) is the sigmatic causative of *artsi* ‘count as’ (34), itself passive of the transitive *rtsi* ‘count’ (from *rtsi* ‘count’).

- (34) *xçiri* *kui-fse* *nura* *kurji* *mu-jnu-γ-rtsi* *lo.*
 weasel SBJ:PCP-be.like DEM:PL beast.of.prey NEG-SENS-PASS-count SFP
 ‘Weasel and the like do not count as beasts of prey (I think).’

Passive verbs can occur as second element of Noun-Verb nominal compounds, but in this case the *a-* prefix is absorbed by the previous nominal root, resulting in a surface form undistinguishable from that of the base verb. For instance, the compound *cnysti* ‘person with a stuffy nose’ can be parsed as *cnyr-* (*status constructus* of *tui-cna* ‘nose’) and *-sti*, a syllable ambiguous between the passive *asti* ‘be blocked’ and the base verb *sti* ‘block’ (108, §5.5.5.2). . The former is more probable, as this noun should be analyzed as meaning ‘(person) whose nose is blocked rather than as ‘blocking noses’.

18.2 Rogative

The rogative⁶ *sy-* prefix is attested on the secundative verbs *mbi* ‘give’ and *jtsʰi* ‘give to drink’, and produces intransitive verbs meaning ‘ask (someone) to X (something) to oneself’ (where X stands for the meaning of the base verb), *symbi* ‘ask for’ and *syjtsʰi* ‘ask for something to drink’, respectively.

⁶This term is from Latin *rogo* ‘I ask, I require’.

22418 The *sy-* prefix is homophonous to that of the antipassive (§18.6.2)⁷ and of the
 22419 proprietive (§18.8) derivations.

22420 Rogative verbs are morphologically intransitive, as shown by (35) (the past
 22421 transitive suffix *-t* would be expected here if this verb were transitive, see §14.3.1)
 22422 and (36) (here a type-C orientation prefix would have been expected §14.3.2.2, §15.1.1).
 22423

22424 However, while the rogative derivation affects transitivity, it does not decrease
 22425 valency: *symbi* and *syjtsʰi* are trivalent like their base verb: they have two arguments
 22426 in addition to the intransitive subject, a semi-object (the entity that is
 asked for) and a dative argument (§14.2.5).

- 22427 (35) *azo a-pi* *ur-cki* *kumtcʰuu ci*
 1SG 1SG.POSS-elder.sibling 3SG.POSS-DAT toy INDEF
 22428 *nur-sy-mbi-a*
 AOR-ROG-give-1SG

22429 'I asked my elder brother/sister to give me a toy.' (elicited)

22430 The semi-object of *symbi* 'ask for' can be a human (including a first or second
 22431 person), in contexts like asking for someone in the context of arranged marriage
 22432 (36) or asking for a child to become recognized as a reincarnated lama.

- 22433 (36) *tce a-ri* *nare ri, nur-sy-mbi-nur*
 LNK 1SG.POSS-younger.sibling DEM:LOC LOC AOR-ROG-give-PL
 22434 'They asked for my younger brother (to come to marry their daughter)
 22435 there.' (14-siblings, 210)

22436 The dative argument is optional, and rarely expressed. Rogative verbs with
 22437 non-overt dative can be used as a polite way to ask for something, as in (37),
 22438 where neither the person asking (the child) nor the addressee (the grandfather,
 22439 that would take the dative) are expressed within the same clause.

- 22440 (37) *a-wuu, tuu-mgo ky-sy-mbi,*
 1SG.POSS-grandfather INDEF.POSS-food OBJ:PCP-ROG-give
 22441 *tui-ci ky-sy-jtshi uifry-tu*
 INDEF.POSS-water OBJ:PCP-ROG-give.to.drink opt-exist:FACT
 22442 'Grandfather, would there be food or water that (we could) ask for (you to
 22443 give us)?' (2011-05-nyima, 81)

⁷The rogative prefix on *symbi* 'ask for' was mistakenly glossed as 'antipassive' in Jacques (2012c: 215), example (32). The antipassive forms of *mbi* 'give' and *jtsʰi* 'give to drink' are *rymbi* 'give to someone' and *ryjtsʰi* 'give to someone to drink', respectively. These forms have the *ry-* antipassive prefix instead of *sy-* (§18.6.4).

The rogative *sv-* is likely to have originated from the combination of the sigmatic causative *su-* and passive *a-* prefixes (§18.1.6). The verbs *mbi* ‘give’ and *jtsʰi* ‘give to drink’ have the passive forms *ambi* ‘be given’ and *ajtsʰi* ‘be given to drink’ (§18.1.4), which select as intransitive subject the theme. A causative derivation from these passive verbs ‘cause X to be given’ could yield the meaning of the rogative derivation (note the semantic similarity with the inversive and rogative functions of the causative discussed in §17.2.5.7 and §17.2.5.4). However, this analysis is not completely straightforward, as one would expect causative verbs to be transitive (not semi-transitive like the rogative verbs) and the dative marking of the addressee is also unexplained.

18.3 Reflexive

While Japhug has a generic pronoun *tuzo* ‘one’ (§6.2.1) and an emphatic pronoun *ray* ‘oneself’ (§6.4), it lacks any reflexive pronoun, and the only way to express reflexive meaning is by means of a dedicated prefix *z̥y̥-*, different from the autive (§19.1), the reciprocal (§18.4) and other valency-decreasing derivations.

18.3.1 The reflexive prefix: form and basic function

Table 18.2 presents several examples of the reflexive prefix *z̥y̥-*, deriving reflexive verbs from transitive ones.

The reflexive derivation turns the base verb into an intransitive verb whose subject acts upon itself, and corresponds to both the transitive subject and the object of the base verb. For instance, in (38), the subjects of the reflexive verbs *c-pju-zyy-yx-la-nuu* ‘they bathe in it=they cause themselves to soak in it’ and *kui-zyy-nusmxn* to heal themselves’ are semantically both agents and patients. When the subject is non-singular, each member of the group corresponding to the subject is acting on himself, as opposed to the reciprocal derivation, where every member performs the same action to other members of the groups, and is agent and patient either simultaneously or in turn (§18.4).

- (38) *tce nuu w-ŋgu ri c-pju-zyy-yx-la-nuu tce li*
 LNK DEM 3SG.POSS-in LOC TRAL-IPFV-REFL-CAUS-soak-PL LNK again
kui-zyy-nusmxn ju-ce-nuu tce,
 SBJ:PCP-REFL-heal IPFV-go-PL LNK
 ‘People go and bathe in (warm springs), they go (there) to heal
 themselves.’ (20-ldWGi, 52;56)

Table 18.2: Examples of reflexive verbs in Japhug

Base verb	Reflexive verb
<i>χtci</i> ‘wash’	<i>zyrχtci</i> ‘wash oneself’
<i>ts'i</i> ‘strangle’	<i>zyrts'i</i> ‘hang oneself’
<i>sat</i> ‘kill’	<i>zyrsat</i> ‘commit suicide’
<i>rku</i> ‘put in’	<i>zyrrku</i> ‘put oneself in’
<i>nystu</i> ‘believe in’	<i>zyrnystu</i> ‘believe in oneself’
<i>fstun</i> ‘take care of’	<i>zyrfstun</i> ‘take care of oneself’

22475 The prefix *zyr-* is highly productive, but only targets objects.⁸ Other syntactic
 22476 functions such as possessors of objects for instance cannot be reflexivized using
 22477 *zyr-*. The form *†zyr-sycyt* (intended meaning ‘comb oneself’) found in one exam-
 22478 ple in the corpus (39a) is a mistake, as pointed out by the consultant who told
 22479 the story (Tshendzin) herself, since *sycyt* ‘comb’ can only take the noun *tui-ku*
 22480 ‘head’ as object, not the person whose hair is combed. The only way to express
 22481 the meaning ‘comb oneself’ is by the autive prefix (§19.1.3) as in (39b).

- 22482 (39) a. *†pjy-zyr-sycyt-ndzi to-rympco~mpcyr-ndzi*,
 IFR-REFL-comb-DU IFR-EMPH~make.up-DU
 22483 Intended meaning: ‘They combed themselves and made themselves
 22484 beautiful.’ (150830 baihe jiemei-zh, 85)
 22485 b. *ndzi-ku pjy-nui-sycyt-ndzi to-rympco~mpcyr-ndzi*,
 3DU.POSS-head IFR-AUTO-comb-DU IFR-EMPH~make.up-DU
 22486 ‘They combed their hair and made themselves beautiful.’ (correction
 22487 of the previous example)

22488 Similarly, in the reflexive causative derivation *zyrsuntcʰyr* ‘cause oneself to
 22489 appear’ from *ntcʰyr* ‘appear’ (§18.3.4), reflexivization by *zyr-* only targets the in-
 22490 transitive subject of the base verb (the entity which appears in the dream, *sungi*
 22491 ‘lion’ in 40a), not the experiencer, which is encoded as possessor of the noun
 22492 *tui-jmjo* ‘dream’. Thus, example (40b) cannot be interpreted as ‘he caused her to
 22493 appear to himself’.

⁸The only exceptions to this rule are a handful of intransitive verbs which take the *zyr-* prefix (§18.3.1.4).

- 22494 (40) a. *w-jmjo* *w-ŋgur* *sun̥gi ko-ntc^hyr*
 3SG.POSS-dream 3SG.POSS-in lion IFR-appear
 'He dreamt of a tiger / A tiger appeared to him in a dream.' (elicited)
- 22495 b. *w-jmjo* *w-ŋgur* *ko-zyy-sui-ntc^hyr*
 3SG.POSS-dream 3SG.POSS-in IFR-REFL-CAUS-appear
 'He made himself appear to her in a dream.' (2012 Norbzang, 116)

22498 18.3.1.1 Transitivity

22499 All reflexive verbs are morphologically intransitive (§14.3.1). In terms of case
 22500 marking however, they are not prototypical intransitive verbs. When their sub-
 22501 ject is overt, it is in absolute form in most cases as in (41), but subjects of reflex-
 22502 ive verbs in the ergative (§8.2.2.3) are also attested (15, §6.2.1).

- 22503 (41) *wzo ku-nu-zyy-fstum* *c^ha*
 3SG IPFV-AUTO-REFL-serve can:FACT
 'It (will) be able to take care of itself on its own.' (150822 laoye zuoshi
 22504 zongshi duide-zh, 149)

22506 In particular, the semi-transitive lexicalized reflexive *zypa* 'pretend' (derived
 22507 from *pa* 'do', §18.3.3) often occurs with subjects marked with the ergative, such
 22508 as the right-dislocated constituent <*tangseng*> *nui kui* in (42) (see also example
 22509 9, §14.2.3).

- 22510 (42) *my-kui-tso* *to-zypa*, <*tangseng*> *nui kui*.
 NEG-SBJ:PCP-understand IFR-pretend ANTHR DEM ERG
 'He pretended not to have understood, Tangseng.' (180503 xiyouji 12-zh,
 22511 46)

22513 18.3.1.2 Reflexivization from ditransitive verbs

22514 The reflexive is possible with indirective verbs of giving or speech, whose objects
 22515 corresponds to the theme (§14.4.1): *k^ho* 'give' and *fçrt* 'tell' yield the reflexive verbs
 22516 *zyrk^ho* 'give oneself up' and *zyrfçrt* 'tell about oneself', as in (43).

- 22517 (43) *nyzo bgra* *wi-jas* *nutcu* *nui-tu-nui-zyy-k^ho* *zo*
 2SG enemy 3SG.POSS-hand DEM:LOC IPFV-2-AUTO-REFL-give EMPH
 wimy-kui-cti-ci?
 PROB-PEG-be.AFF-PEG
 '(By doing that), aren't you handing yourself over to your own enemy?'
 22519 (2014niulan li de lu-zh, 11)

22521 The *zyr*- prefix can only express reflexivization of the theme of indirective
 22522 verbs, never the dative-marked recipient; for instance, it cannot be prefixed to
 22523 an indirective verb such as *t'u* ‘ask’ (§14.4.1) to convey the meaning ‘ask oneself’.
 22524 With the secundative verb *mbi* ‘give’, the reflexive prefix is not possible either,
 22525 though for pragmatic rather than syntactic reasons.

22526 18.3.1.3 Permissive function

22527 The reflexive prefix can in some cases have the permissive function ‘let oneself
 22528 be *X*’, the most common case with the verb *zyrnuβlu* ‘be fooled’ from the trans-
 22529 sitive denominal verb *nuβlu* ‘cheat’ (‘let oneself be cheated’). With most transi-
 22530 tive verbs, this meaning is expressed by means of the reflexive+causative double
 22531 derivation (§18.3.4).

22532 In (44), an overt agent (corresponding to the causee of the causative construc-
 22533 tion) marked with the ergative *kui* appears with the verb *zyrnumbrypu* ‘let one-
 22534 self be mounted’. Although taken from a text translated from Chinese, it is not
 22535 considered incorrect after rechecking with Tshendzin.

- 22536 (44) *tcendyre mbro kui “ju-pe” to-ti ju-ŋu. tcendyre turme nu*
LNK horse ERG SENS-be.good IFR-say SENS-be LNK man DEM
kui to-zyr-numbrypu ju-ŋu tce tce turme nuu mbro u-taε
ERG IFR-REFL-ride SENS-be LNK LNK man DEM horse 3SG.POSS-on
nutcu to-œ ju-ŋu tce,
DEM:LOC IFR:UP-go SENS-be LNK

22539 ‘The horse said ‘good’ and let himself be mounted by the man, and the
 22540 man rode on him.’ (ma he lu-zh, 221-23)

22541 18.3.1.4 Reflexivization of intransitive verbs

22542 A handful of intransitive verbs can undergo reflexivization with the *zyr*- prefix.

22543 With intransitive deadverbal (§15.1.3.4) and denominal verbs of relative loca-
 22544 tions in *mr*-, such as *maylo* ‘be upstream’ and *mypyrtʰyβ* ‘be in the middle’, the
 22545 reflexive prefix derives volitional motion verbs such as *zyrmaylo* ‘put oneself up-
 22546 stream’ (45) and *zyrmypyrtʰyβ* ‘put oneself in between’. It is possible that these
 22547 forms come from the simplification of former reflexive+causative (§18.3.4) by loss
 22548 of the causative prefix.

- 22549 (45) *wi-l-ycu nutcu jo-ce tce lo-zyy-majlo.*
 3SG.POSS-upstream DEM:LOC IFR-go LNK IFR:UPSTREAM-REFL-be.upstream
 ‘(The wolf) went to a place upstream (from the lamb), he placed himself upstream.’ (2014 lang he yang, 8-9)

The pair of intransitive verbs *yrtçə* ‘be wrong’ and *yŋŋgi* ‘be right’ have the reflexive forms *zyyrtçə* ‘recognize one’s mistake’ and *zyyŋŋgi* ‘consider oneself to be right’, as shown by (46). Note that the causative of these verbs has a tropative meaning, for instance the causative *zyrtçə* ‘consider to be wrong’ in the second clause of (46); the reflexive forms thus have the expected meaning of reflexive+causative double derivations (‘consider oneself to be right/wrong’).

- | | | | | |
|-------|------|--|---------------------------------|-----------------------------|
| 22558 | (46) | <i>tuzo pjui-kui-z-yx-tytca</i> | <i>ra</i> | <i>ma,</i> |
| | | GENR IPFV-GENR:S/O-REFL-be.wrong | be.needed:FACT | LNK |
| 22559 | | <i>tui-zda</i> | <i>pjúu-wy-z-yxtca,</i> | <i>tuzo (...)</i> |
| | | GENR.POSS-companion | IPFV-INV-CAUS-be.wrong | GENR |
| 22560 | | <i>pui-kui-nui-yxtca</i> | <i>kuny pjui-kui-z-yx-yyngi</i> | <i>tce,</i> |
| | | IPFV-GENR:S/O-REFL-be.wrong | also | IPFV-GENR:S/O-AUTO-be.right |
| 22561 | | <i>wi-mbryzwi</i> | <i>kui-tu</i> | <i>me</i> |
| | | | | <i>tu-kui-ti</i> |
| | | | | <i>pui-nyu.</i> |
| | | 3SG.POSS-result | SBJ:PCP-exist | not.exist:FACT |
| 22562 | | IPFV-GENR:S/O-say | SENS-be | |
| 22563 | | 'One has to recognize one's mistakes; if one considers one's companions | | |
| 22564 | | to be wrong, and if one consider oneself to be always right even if one is | | |
| | | wrong, there will be no (good) result.' | IWlu | 80-82) |

The reflexive verb *zyrysęć* ‘burn oneself’ appears to derive from the proprietary verb *sęć* ‘be burning’ (from *ć* ‘burn’, §18.8), though from its meaning it is tempting to wonder whether this prefix *s-* here is not rather analyzable as an irregular causative (§17.2.2).

- 22569 (47) *ma-pur-tui-zyy-sy-cke*
NEG-IMP-2-REFL-PROP?-burn
22570 'Don't burn yourself!' (elicited)

22571 One reflexive verb seems to derived from an ideophone rather than from a verb
22572 root: *zyy̚cpʰyβ* ‘lay flat’ (48)⁹ shares the same root |*cpʰyβ*| as *cpʰyβcpʰyβ* ‘laying flat’
22573 (49). It is possible that this verb originates from a deideophonic derivation (§20.9),
22574 with subsequent deletion of the denominational prefix.

⁹The vowel alternation in (48) is regular, see §14.2.1.1.

- 22575 (48) *uu-t^hor* *zui pui-zyycp^haβ-a*
 3SG.POSS-ground LOC AOR-lay.flat-1SG
 22576 'I laid flat on the ground.' (elicited)
- 22577 (49) *uu-t^hor* *cp^hyβcp^hyβ* *zo pui-ryzi, ky-nuqambuumbjom*
 3SG.POSS-ground INPH(II):laying.flat EMPH SENS-stay INF-fly
 22578 *múaj-c^ha*
 NEG:SENS-can
 22579 'The bird is staying on the ground without moving, it cannot fly.' (elicited)

22580 18.3.1.5 Other reflexive constructions

22581 The reflexive *zyr*- is almost the only way to express reflexivity in Japhug. How-
 22582 ever, the antipassive verb *ra-χtci* (from the transitive verb *χtci* 'wash'), has the
 22583 meaning 'wash one's face' or 'have a shower' (§18.6.7.5), almost like that of the
 22584 regular reflexive *zyrχtci* 'wash oneself'. Similarly, the prefix *rr*- in *rrmpcyr* 'make
 22585 up' from *mpcyr* 'be beautiful' is reflexive-like ('make oneself beautiful', see §19.7.5).

22586 18.3.2 Reflexive vs. anticausative

22587 Transitive verbs such as *tqaβ* 'cause to fall/roll', *kry* 'bend' or *xt^hom* 'put hori-
 22588 zontally' which have a corresponding prenasalized anticausatives (§18.5) use the
 22589 reflexive derivation to express the corresponding intransitive volitional action.

22590 The action of the transitive verb itself can be either volitional (50) or non-
 22591 volitional (including involuntary actions of animate beings and actions of inani-
 22592 mate referents, as in 51) depending on the context.

- 22593 (50) *tr-pytso* *nui ki* *kui-fse*
 INDEF.POSS-child DEM DEM.PROX SBJ:PCP-be.like
 22594 *lu-xt^hom-nui* *ku-cui-rŋgu-nui*
 IPFV:UPSTREAM-put.horizontally-PL IPFV-CAUS-lie.down-PL
 22595 *pui-ma,*
 PST.IPFV-not.be
 22596 'People would not lie the babies down horizontally like this.' (140426
 22597 tApAtso kAnWBdaR1, 57)

- 22598 (51) *rdystar nuu uu-tuu-rzi* *kua uu-t^hob*
 stone DEM 3SG.POSS-NMLZ:DEG-be.heavy ERG 3SG.POSS-ground
 22599 *pjy-wy-tsaβ* *tce pjy-wy-sat.*
 IFR:DOWN-INV-cause.to.fall LNK IFR:DOWN-INV-kill
 22600 ‘The stones (in the wolf’s belly) were so heavy that they caused him to
 22601 fall down and die.’ (140428 xiaohongmao-zh, 171)

22602 The anticausative verbs are nearly always non-volitionally (see §18.5.5), as il-
 22603 lustrated by (52) and (53).

- 22604 (52) *tce rŋgur nuni (...) to-k-ymui-rpu-ndzi* *tce*
 LNK boulder DEM:DU IFR-PEG-RECIP-bump-DU LNK
 22605 *pjy-ngrui-ndzi* *tce tʂyndo*
 IFR:DOWN-ACaus:shatter-DU LNK side.of.the.road
 22606 *pjy-ndzaβ-ndzi.*
 IFR:DOWN-ACaus:cause.to.roll-DU
 22607 ‘The two boulders bumped into each other, shattered, and rolled down
 22608 the side of the road.’ (28-smAnmi, 143)

22609 In (53), the verb *lo-ndom* means ‘lie down horizontally after falling down (out
 22610 of exhaustion)’, as shown by (54), the gloss provided in Japhug for this verb form,
 22611 which also involves the anticausative verb *ndzaβ* ‘fall/roll’.

- 22612 (53) *tcendyre uu-bi* *nuu ky-ŋke muu-ny-c^ha tce*
 LNK 3SG.POSS-younger.sibling DEM INF-walk NEG-IFR-can LNK
 22613 *tcendyre lo-ndom* *cti tce*
 LNK IFR:UPSTREAM-ACaus:put.horizontally be.AFF:FACT LNK
 22614 ‘His younger brother was not able to walk anymore, and lay down.’
 22615 (2011-05-nyima, 58-59)
- 22616 (54) *uu-ku lo lo-ru tce*
 3SG.POSS-head upstream IFR:UPSTREAM-look LNK
 22617 *pjy-ndzaβ,* *tce ky-nuu-ryru my-kuu-c^ha nuu,*
 IFR:DOWN-ACaus:cause.to.fall LNK INF-AUTO-get.up NEG-SBJ:PCP-can DEM
 22618 *tce lo-ndom tu-kuu-ti nuu-ŋju*
 LNK IFR:UPSTREAM-ACaus:put.horizontally IPFV-GENR:S/O-say SENS-be
 22619 ‘He fell down, head looking upstream, not able to get up by himself, so
 22620 one says *lo-ndom*.’ (elicited, explanation of example 53)

On other hand, the combination of the transitive verb with the reflexive expresses a volitional meaning implying that the action was done on purposive by an animate agent. In (55), the subject of *jny-zyy-xt^hom* ‘he put himself horizontally=he laid down horizontally’ did not fall down (unlike that of example 53), but on the contrary lays down on the ground by himself voluntarily to pretend to have fallen down and have died.

- (55) *tsu nuutcu jny-zyy-xt^hom tce puu-kui-si*
 road DEM:LOC IFR:WEST-REFL-put.horizontally LNK AOR-SBJ:PCP-die
to-zyypa.
 IFR-pretend
 ‘He laid down on the road horizontally and pretended to be dead.’ (140517
 huli he lang-zh, 12)

In (56), the verb *zyytsaβ* ‘cause oneself to fall/roll’ expresses the same action as *mtsab* ‘jump’, a clearly volitional motion verb.

- (56) *tii-ci kui-wxtar~wxti nuu ui-ηgwa nuutcu*
 INDEF.POSS-water SBJ:PCP-EMPH~be.big DEM 3SG.POSS-in DEM:LOC
ko-mtsab. tce nuutcu ko-zyy-tsaβ q^he
 IFR:EAST-jump LNK DEM:LOC IFR:EAST-REFL-cause.to.roll LNK
 ‘He jumped into the river, he let himself roll into it.’ (150830 baihe
 jiemei-zh, 209-2012)

When no prenasalized anticausative verb exists, the reflexive can still be used to insist on the volitional character of a usually non-volitional action in combination with a causative prefix (§18.3.4.1).

18.3.3 Lexicalized reflexives

A few reflexive verbs have meanings that are unpredictable from their base verbs and have become highly lexicalized.

The semi-transitive verb *zyyra* ‘pretend’ (§18.3.1.1, §14.2.3, §16.1.1.6) transparently comes from the reflexive of the light verb *pa* ‘do’ (§22.4.2.5), probably through a meaning such as ‘make oneself into X’. This verb is also attested as a stative verb meaning ‘be arrogant’.

The intransitive auxiliary *zyystu*, which occurs as a light verb with ideophones (§10.1.7.3) to express voluntary actions, is the reflexive of the simulative verb *stu* ‘do like’ (§14.4.2, §25.4.1.2).

The verb *zyyctuz* ‘reveal one’s true nature’ (57) derives from the orienting verb *ctuz* ‘turn towards’ (§15.1.2.4).

- 22652 (57) *wzo nu^{st^h}*uci pjur-su^{zdu}y-a *máj-pe* *ny-su^{so} tce*
 3SG so.much IPFV-cause.to.worry-1SG NEG:SENS-be.good IFR-think LNK
 22653 *ko-zy^{rct^h}*uz.
 IFR-reveal.oneself
 22654 ‘She thought: “It is not good of me to cause him so much worries”, and
 22655 she revealed her true identity to him.’ (2003kAndzwsqhaj2, 125)

22656 18.3.4 Reflexive causative

22657 Reflexive derivations from causativized verbs are extremely common in Japhug,
 22658 and have a considerable diversity of uses.

22659 18.3.4.1 Reflexive causative and volitionality

22660 When applied to non-volitional intransitive verbs, the double (causative+reflexive)
 22661 derivation is a strategy to express volitional action. For instance, a non-volitional
 22662 verb like *fka* ‘be full’ is not attested in the Imperative (§21.4.2.2). The doubly de-
 22663 rived *zyy-cuu-fka*, which conveys the meaning ‘cause oneself to become full=eat
 22664 to one’s full’, can on the other hand occur in the Imperative, as in (58).

- 22665 (58) *ty-zyy-cuu-fka*
 IMP-REFL-CAUS-be.full
 22666 ‘Eat to your full!’ (a common polite expression)

22667 Examples (58) and (59), illustrate that the reflexive prefix is compatible with
 22668 both the velar (§17.3.4) and the sigmatic (§17.2) causative prefixes.

22669 Note that the meaning of *zyyzyzo* ‘make oneself light’ can also be expressed
 2270 with a periphrastic construction as in (68) below.

- 22671 (59) *nyzo nu_i, ty-muj* *st^huci a-ty-tui-zyy-y_Y-zo,*
 2SG DEM INDEF.POSS-feather so.much IRR-PFV-2-REFL-CAUS-be.light
 22672 *ny-mbro* *nunu qale st^huci a-ty-zyy-y_Y-mbjom* *tce,*
 2SG.POSS-horse DEM wind so.much IRR-PFV-REFL-CAUS-be.quick LNK
 22673 ‘(If) you make yourself as light as a feather, and your horse makes itself
 22674 as quick as the wind, (you will succeed).’ (2011-04-smanmi, 65-66)

22675 This use of the double causative+reflexive derivation is similar to the reflex-
 22676 ivization of transitive verbs that have prenasalized anticausative counterparts to
 22677 express the volitional intransitive (§18.3.2).

When the meaning of the causative verb is not completely predictable from that of the base verb, the reflexivized verb always follows the meaning of the causative, rather than that of the base verb. For instance, *zyr-yr-la* ‘bathe into, immerse oneself into’ (example 38 above), derives from the intransitive verb *la* ‘soak’ through the causative *yr-la* ‘immerse, dip in’. However, even in this case the doubly derived verb *zyr-yr-la* is volitional and the base verb *la* ‘soak’ non-volitional (and essentially only takes inanimate subjects).

When the base verb is an intransitive verb that can be used volitionally, the doubly derived verb is used to put emphasis on the fact that the subject took active measures to perform the action. For instance the verb *mbyom* ‘be in a hurry’ (a verb whose Imperative form *tx-mbyom* ‘hurry up!’ exists) has the double derivation *zyr-cuu-mbyom* ‘hasten, hurry, strive to do X as fast as possible’, as in (60).

- (60) *to-zyr-cuu-mbyom zo jo-nuu-ce tce u-jilco ra*
 IFR-REFL-CAUS-be.in.a.hurry EMPH IFR-VERT-go LNK 3SG.POSS-villager PL
nur-cki to-ti.
 3PL.POSS-DAT IFR-say

‘He hastened to go back (to the village), and told it to the other villagers.’
 (150902 hailibu-zh, 109)

Some intransitive verbs have both volitional and non-volitional uses, with slightly different meanings. For instance, the intransitive *nqor* has two meanings: ‘hang, be hanging’ or ‘grab and cling onto’ (see 204 in §8.3.4.3, and 126 in §7.5.2). The doubly derived verb *zyr-cuu-nqor* ‘let oneself hang’ (as in 61) only reflects the first meaning of the base verb (the non-volitional ‘be hanging’).

- (61) *porxt nuu kurny tcetu kʰyrka nutcu tce*
 small.spider DEM also up.there ceiling DEM:LOC LOC
pjui-zyr-cuu-nqor ηgryl.
 IPFV:DOWN-REFL-CAUS-hang be.usually.the.case:FACT
 ‘The small spider also lets itself hang down from the ceiling.’
 (26-mYaRmtsaR, 103)

18.3.4.2 Reflexive of tropative causatives

Some causative verbs have tropative (‘consider X to be Y’, §17.5) or causative tropative (‘cause people to consider X to be Y’), for instance *yrkʰe* ‘depreciate, demean’ from *kʰe* ‘be stupid’ (§17.5.5). Reflexive verbs deriving from this type of causative mean ‘(cause people to) consider oneself to be Y’; for example, *zyryrkʰe* ‘depreciate, demean’ is not used in meaning ‘cause oneself to become stupid’.

22709 18.3.4.3 Motion verbs

22710 With the stative verbs of relative location *armbat* ‘be near’ and *arq^hi* ‘be far’, the re-
 22711 flexive+causative double derivations produce the motion verbs *zÿrsÿrmbat* ‘move
 22712 closer’ and *zÿrsÿrq^hi* ‘move further away’, whose goal is marked in the dative, as
 22713 in (62) (see also 59 in §5.1.3). Although zero conversion of these stative verbs into
 22714 motion verbs is also attested (§15.1.2.5), the double derivation is by far the most
 22715 common way of expressing these meanings.

- 22716 (62) *uizo daltsutsa zo li, masyrurju zo, srutp^hu nuu ui-cki*
 3SG slowly EMPH again in.secret EMPH ogre DEM 3SG.POSS-DAT
 22717 *ko-zÿr-suu-yrbat.*

IFR:EAST-REFL-CAUS-be.near

22718 ‘He moved closer to the ogre slowly in secret.’ (160706 poucet6, 91)

22719 When the base verb is a motion verb, the reflexive+causative double derivation
 22720 also yields a motion verb, as in the case of *zÿr-suu-ryzyut* ‘manage to reach’ from
 22721 *ryut* ‘reach’ (on the *r-* prefixal element, see §14.2.2). The verb *zÿr-suu-ryzyut* differs
 22722 from its base verb in that it expresses that the subject had to strive hard to reach
 22723 the goal, as example (63) illustrates.

- 22724 (63) *uu-tuu-yrq^hi pÿr-saxas zo ri, nuu kany*
 3SG.POSS-NMLZ:degree-be.far IFR.IPFV-be.extremely EMPH LNK DEM also
 22725 *jo-zÿr-suu-ryzyut.*

IFR-REFL-CAUS-reach

22726 ‘(China)_i was very far, but even so he managed to reach it_i.’ (140511
 22727 alading-zh, 22)

22728 18.3.4.4 Reflexive causatives from transitive verbs

22729 When the base verb is transitive, the result of the reflexive+causative double
 22730 derivation is still an intransitive verb.

22731 The double derivation can have a plain compositional meaning, as in *zÿr-suu-
 22732 rtoꝝ* ‘have oneself examined’ in (64). The reflexivized argument corresponds to
 22733 the causer and object of the base verb. The causee *smynba* ‘doctor’ does not re-
 22734 ceive ergative marking, and is not indexed on the verb, as an inverse 3→2 con-
 22735 figuration (§14.3.2.1) would be nonsensical in (64).

- 22736 (64) *smynba a-ty-tuu-zÿr-suu-rtoꝝ*
 doctor IRR-PFV 2-REFL-CAUS-see
 22737 ‘You should have yourself examined by a doctor.’ (elicited)

22738 Doubly derived verbs can also express involuntary actions ‘get oneself Xed’.
 22739 For instance, the reflexive+causative *zÿr-su-sat* from *sat* ‘kill’ can have the mean-
 22740 ing ‘get oneself killed’, as in (65).

- 22741 (65) *ma βyuu nyu tce, kʰyrkuu ra wuma zo yi. tce*
 LNK badger be:FACT LNK side.of.the.house PL really EMPH come:FACT LNK
 22742 *nunu pjuu-zÿr-sur-sat ngrsl.*
 DEM IPFV-REFL-CAUS-kill be.usually.the.case:FACT
 22743 ‘The badger often comes near houses, and gets itself killed. (The dogs
 22744 chase it and kill it, and people also kill it.)’ (27-spjaNkW, 127-129)

22745 With some transitive verbs, the double derivation has the same meaning ‘take
 22746 pains to *X*, strive to *X*’ as with intransitive verbs above (examples 60 and 63).
 22747 For instance, the reflexive causative *zÿr-su-pjyl* of the transitive motion verb *pjyl*
 22748 ‘go around, cross, avoid’ (§15.1.2.1) means ‘strive to avoid *X*, take the necessary
 22749 measures to avoid *X*’ rather than ‘get oneself avoided’: with this verb, the re-
 22750 flexivization targets the causee rather than the object (‘cause oneself to avoid *X*’
 22751 rather than ‘cause *X* to avoid oneself’).

- 22752 (66) *tcendyre nuu tu-ky-zÿr-su-pjyl kowa ntsui*
 LNK DEM IPFV-INF-REFL-CAUS-go.around manner always
 22753 *tu-βzu-ndzi pjy-nyu.*
 IPFV-make-DU IFR.IPFV-be
 22754 ‘(The mouse and the sparrow) took every measure to avoid (the cat).’
 22755 (IWlu, 20)

22756 The causative verbs *sypa* ‘transform’ and *syβzu* ‘transform’ (§18.1.6) derived
 22757 from the lexicalized passive verbs *apa* ‘become’ and *aβzu* ‘become, grow’ (§18.1.2)
 22758 are ditransitive, selecting as object the entity that undergoes transformation, and
 22759 as semi-object the entity into which the change occurs. Reflexivization targets
 22760 the object, and the corresponding reflexive forms *zÿrsypa* and *zÿrsyβzu* mean
 22761 ‘transform oneself into *X*’ (rather than ‘transform *X* into oneself’). They select as
 22762 semi-object the entity into which the subject is transformed, for instance *pjyrgyt*
 22763 ‘vulture’ in (67).

- 22764 (67) *sloχpuun nuu ci nuu-zÿr-syphyr ny pjyrgyt ci*
 teacher DEM a.little AOR-REFL-shake ADD vulture INDEF
 22765 *nuu-nuu-zÿr-su-βzu nuu-nyu.*
 AOR-AUTO-REFL-CAUS-become SENS-be
 22766 ‘The teacher shook himself, and transformed himself into a vulture.’
 22767 (2003kandZislama, 61-62)

22768 Just like the causative verbs *sypa* and *sypzu* from which they are derived (example
 22769 33, §18.1.6, §17.2.8), *zyrsypa* and *zyrsybz* can select as semi-object participial
 22770 clauses, and be used as periphrastic causative constructions (§24.5.1.1), as in (68),
 22771 where instead of the reflexive causative verb *zyryz* ‘make oneself light’ (exam-
 22772 ple 59 above), the participle *kui-zo* ‘the one who is light’ occurs as semi-object of
 22773 *zyrsypa* ‘transform oneself into’.

- 22774 (68) *turme uzo numuu rcanuu [t̪y-muj zo kui-fse*
 22775 man 3SG DEM UNEXP:DEG INDEF.POSS-feather EMPH SBJ:PCP-be.like
kui-zo] ny-zyy-sui-ypa,
 22776 SBJ:PCP-be.light IFR-REFL-CAUS-become
 ‘The man, him, made himself as light as a feather.’ (04-smanmi, 84)

22777 18.3.5 Reflexive and autive

22778 Reflexive and autive (§19.1) derivations have completely different semantics, and
 22779 distinct morphosyntactic properties, since the latter does not change the verb
 2280 transitivity. With a handful of verbs such as *bmuy* ‘intend to, decide’, the reflexive
 2281 form has an autobenefactive meaning (*zyrbmuy* ‘decide for oneself’), but the
 2282 transitivity is changed.

22783 The autive *nu-* (§19.1) is compatible with the reflexive *zyy-*. It is the only derivational
 22784 prefix that precedes the reflexive prefix in the prefixal chain (§11.2.2). The
 22785 autive+reflexive combination has four different meanings.

22786 First, it can express and involuntary action that the subject both causes and
 22787 suffers from (as in 43 above).

22788 Second, the *nu-* prefix can also be used to put emphasis on the fact that the
 22789 subject perform the reflexive action by him/her/itself without external help, as
 22790 in (69).

- 22791 (69) *tcet^ha tur-ji ui-ŋgwu numura, icq^ha tu-rdo^h*
 22792 later INDEF.POSS-field 3SG.POSS-in DEM:PL FILLER one-piece
kui-fse nura cuu-ndze, tcendyre, uzo
 22793 SBJ:PCP-be.like DEM:PL TRAL-eat[III]:FACT LNK 3SG
ku-nur-zyy-fstun c^ha
 IPFV-AUTO-REFL-take.care can:FACT
 22794 ‘(This hen) will go and eat the grains in the fields, it will be able to take
 22795 care of itself on its own.’ (150822 laoye zuoshi zongshi duide-zh, 149)

22796 Third, the *nu-* prefix is also found with the autobenefactive meaning ‘for one-
 22797 self’ in these forms. In (70) for instance, the autive prefix occurs to insist on the
 22798 fact that the parents (dual subject) ate to their full in the absence of their children.

- 22799 (70) *ndzi-pyri kui-pui-pe to-βzu-ndzi q^he, zyni*
 3DU.POSS-diner SBJ:PCP-EMPH~be.good IFR-make-DU LNK 3DU
 22800 *to-nui-zyy-cui-fka-ndzi.*
 IFR-AUTO-REFL-CAUS-be.full-DU

22801 ‘They made a nice dinner for themselves, and ate to their fill.’ (160701
 22802 poucet2, 16-17)

22803 Fourth, it can occur to express an action taking place spontaneously without
 22804 external agent, as in (71).

- 22805 (71) *kum c^hy-nui-zyy-sui-ytsa*
 door IFR-AUTO-REFL-CAUS-be.locked
 22806 ‘The dock locked itself.’ (elicited; describes house doors with an
 22807 automatic locking system)

22808 The autive is common on verbs with reflexive and causative prefixes (§18.3.4),
 22809 resulting in a triple derivation, as in (70) and (71) above.

22810 18.3.6 Reflexive, tropative and applicative

22811 Apart from the causative, the reflexive derivation can be added after other valency-
 22812 increasing derivations such as the tropative and the applicative.

22813 As an example of reflexivized tropative, *nrympçrr* ‘consider to be beautiful’
 22814 (from *mpçrr* ‘be beautiful’) can be reflexivized as *zÿnympçrr* ‘consider oneself
 22815 to be beautiful’ (§17.5.4).

22816 The applicative verbs *nuymu* ‘be afraid of’ and *nurga* ‘like, love’ (from *mu* ‘be
 22817 afraid’ and *rga* ‘like’) have reflexive form *zÿr-nui-rga* and *zÿr-nuy-mu* which can
 22818 either mean ‘like/be afraid of oneself’ or have a reflexive+causative meaning
 22819 ‘have people like/be afraid of oneself’. The latter meaning can also be expressed
 22820 with a triple derivation such as *zÿr-z-nuy-mu* with the causative *z-* between the
 22821 reflexive and the applicative prefixes.

22822 The applicative *nystu* ‘believe in’, which selects as object the person one be-
 22823 lieves in (example 102, §17.4.1), can also be reflexivized as *zÿnystu* ‘believe in
 22824 oneself’, as in (72).¹⁰

¹⁰This example is from a translated story, but the presence of a second object (the relative *nu pa-mto nura*) is not due to calquing from the original (which has 不敢相信 <bùgǎnxiāngxìn> ‘he did not dare to believe it’), and was not considered to be clumsy upon rechecking.

- 22825 (72) *nua pa-mto nura muu-nv-zyy-nv-stu.*
 DEM AOR:3→3'-see DEM:PL NEG-IFR-REFL-APPL-believe
 22826 'He did not believe the things that he himself had (just) seen.' (150830
 22827 baihe jiemei-zh, 106)

22828 18.3.7 Historical origin

22829 The reflexive *zyr-* is cognate to forms found in other Gyalrong languages, includ-
 22830 ing Tshobdun *ojp-* ([Sun 2014a](#)), Zbu *vjp-* ([Gong 2018: 9](#)) and Situ *wjp-*.¹¹ These pre-
 22831 fixes go back to a proto-Gyalrong form **wjp-* (with a variant **wɔjp-* for Tshobdun)
 22832 with metathesis in Japhug. However, the cluster *zy-* is otherwise only attested in
 22833 Japhug in ideophones such as *zyrzyrr* 'having some (pieces) coming out (out of
 22834 a bundle)' ([§10.1.5.1](#)).¹²

22835 This prefix itself is possibly the incorporated *status constructus* form of the
 22836 third singular pronoun **wəjaj* (corresponding to Japhug *uzo* 'he', [§6.1](#), whose
 22837 irregular phonology is discussed in [§5.1.1.5](#)); typological parallels of the PERSONAL
 22838 PRONOUN → REFLEXIVE change proposed here also exist in Yukaghir ([Jacques](#)
 22839 [2010b](#), [Maslova 2007: §5.2](#)).¹³

22840 The reflexive prefix is a core Gyalrong innovation, not shared even by Khros-
 22841 kyabs. The reflexive prefix *ɛjæ-* in Khroskyabs is not directly related to its core
 22842 Gyalrong equivalent, as it is based on the denominal *ɛ-* ([Lai 2017: 300](#)), cog-
 22843 nate of the Japhug stative denominal *a-* ([§20.2](#)). Both Khroskyabs *ɛjæ-* and proto-
 22844 Gyalrong **wjp-* reflexive prefixes share the *status constructus* of the pronominal
 22845 base **jaj-* (Japhug *-zo*, [§6.1](#)), but result from independent grammaticalizations.

22846 18.4 Reciprocal

22847 18.4.1 Reduplicated reciprocal

22848 The reduplicated reciprocal derivation is the productive way of expressing mu-
 22849 tual action in Japhug. It combines the *a-* prefixal element found in the passive
 22850 ([§18.1](#)) and several denominal derivations ([§20.2](#)) with the partially reduplicated
 22851 stem of the base verb. If the verb has a polysyllabic stem (whether or the the
 22852 non-final syllable are derivational prefixes), only the last syllable is reduplicated.
 22853 For instance *rqor* 'hug', *nupor* 'kiss' and *nurutṣa* 'envy'¹³ yield *a-rqu~rqor* 'hug

¹¹Some dialects of Zbu however have a divergent reflexive prefix *nv-*, which cannot be cognate to the forms discussed here ([Gong 2018: 9](#)).

¹²For an alternative etymology, see [Sun \(2014a\)](#).

¹³The verb *nurutṣa* 'envy' is denominal from *rutṣa* 'envy' (n).

each other' (73), *a-nupu~poꝝ* 'kiss each other' and *a-nurutsu~tſa* 'envy each other', respectively.

As in other cases of partial derivation, the reduplication disregards morpheme boundaries: when the reciprocal derivation is applied to verbs with the *suy-* and *nuy-* allomorphs of the sigmative causative (§17.2.1.4) and applicative (§17.4.2), the final *y-* is reduplicated together with the monosyllabic verb root.

For instance, the reciprocal of the applicative *nuybuy* 'miss, long for' is *anuybu~ybuy* 'miss each other' (§18.4.1.2), despite the fact that the verb root is *buy* 'miss home' (Table 17.10, §17.4) and that the preinitial *y-* belongs to the applicative prefix.

Since reduplicated reciprocal has two exponents (*a-* and reduplication), in the glosses only the *a-* prefix is glossed as RECIP, while the reduplication left unglossed to avoid unnecessary redundancy: thus *a-rqu~rqoꝝ* is glossed as RECIP-hug rather than as RECIP-RECIP-hug.

The *r/a/o* allomorphy of the *a-* element, and the presence of the peg *k-...-ci* (§11.4) in the Inferential (as in 73) follows the same rules as other contracting verbs (§12.3, §15.1.1.2).

Reciprocal verbs are morphologically intransitive, and their subject is necessarily non-singular except in the case of verbs expressing naturally collective action (Kemmer 1993: 123–127) (as in 77 below), in generic forms, where number is neutralized, or when the subject is a group of inanimate and poorly distinguishable entities.

When the plural or dual subject of the reciprocal verb is the combination of a previously mentioned entity or group with another group, the comitative *c^ho* (§8.2.5) can be used to specify the second group.

For instance, in (73), the subject of the verb *ko-k-r-rqu~rqoꝝ-nuu-ci* 'they hug each other' corresponds to the sum of referent of the subject of the first verb *jo-nuu-ce* 'he went back' with the group of people referred to by the postpositional phrase *w-yi ra c^ho* 'with his relatives' (see §14.2.5 for examples of the same phenomenon with non-reciprocal verbs).

- (73) *k^ha jo-nuu-ce tcendyre [w-yi ra c^ho]*
 home IFR-VERT-go LNK 3SG.POSS-relative PL COMIT
ko-k-r-rqu~rqoꝝ-nuu-ci zo jy-yywu-nui.
 IFR-PEG-RECIP-hug-PL-PEG EMPH IFR-cry-PL
 'He went home and he and his relatives hug each other and cried.' (140512
 fushang he yaomo1, 35)

Expectedly, the reciprocal of secundative verbs (§14.4.2) targets the recipient object; for instance, *mbi* 'give' yields *ambumbi* 'give to each other' (74).

- 22889 (74) *tce nur ui-ŋgu sruasmyn ra pjui-lst-nuu, tce nura*
 LNK DEM 3SG.POSS-in medicine PL IPFV:DOWN-release-PL LNK DEM:PL
 22890 *pjui-nuu-lst-nuu tce nura jui-ŋmbui-mbi-nuu ra ŋu*
 IPFV:DOWN-AUTO-release-PL LNK DEM:PL IPFV-RECIP-give-PL PL be:FACT
 22891 ‘They put medicine (against sinus inflammation) into the (snuff tobacco)_i,
 22892 and they give it_i to each other.’ (30-CnAto, 17-18)

22893 The reduplicated reciprocal derivation can also express naturally collective
 22894 events without clearly distinct agents and patients, such as *awuwum* ‘gather to-
 22895 gether’ (75) from *wum* ‘gather’.

- 22896 (75) *qartsui t̪y-md̪a qʰe tce cʰui-γ-wuu~wum-nuu qʰe*
 winter AOR-be.the.time LNK LNK IPFV:DOWNSTREAM-RECIP-gather-PL LNK
 22897 *kur-dur-dyn zo tuturca ku-ryzi-nuu jui-ŋu*
 SBJ:PCP-EMPH~be.many EMPH together IPFV-stay-PL SENS-be
 22898 ‘When winter arrives, they gather and stay together in great numbers.’
 22899 (23-qapGAmtWmtW, 107-108)

22900 The meaning of this reciprocal form is also slightly different from that of the
 22901 base verb, since *wum* ‘gather’ has a wide range of extended meanings, such as
 22902 ‘take as a X’ (as in example 24, §8.1.7) or ‘fold wings’ (as in 92, §15.1.4.3) which are
 22903 completely absent from the reciprocal form. In addition, the verb *wum* typically
 22904 takes non-human entities as objects when meaning ‘gather’ as in (76).

- 22905 (76) *tursa ui-rkuu xpun-ŋga tʰamtct̪t a-c-t̪y-tuu-wum*
 cemetery 3SG.POSS-side monk-clothes all IRR-TRAL-PFV-2-gather
 22906 *tce*
 LNK
 22907 ‘Go and collect all the monk robes near the cemetery.’ (2003qachGa, 155)

22908 The intransitive verb *andundo* derived from *ndo* ‘catch’ can have a prototypical
 22909 reciprocal meaning ‘grab each other’ (especially relative to fighting, see example
 22910 85 below, §18.4.1.2). It also occurs with the naturally collective event meaning
 22911 ‘be clustered together’ as in (77) with a singular verb form, due to the fact that
 22912 mushrooms are poorly differentiable inanimate referents (§14.6.1.1).

- 22913 (77) *tce tce ui-qa nuu jui-γ-ndui~ndo, ui-tak nuu ki*
 LNK LNK 3SG.POSS-foot DEM SENS-RECIP-take 3SG.POSS-top DEM DEM.PROX
 22914 *kui-fse kui-dur~dyn jui-ŋu tce,*
 SBJ:PCP-be.like SBJ:PCP-EMPH~be.many SENS-be LNK
 22915 ‘The base (of the mushroom 刷把菌 <shuābājūn> ‘Ramaria formosa’) is

22916 all clustered together, but it has many top parts.' (23-tshAYCAnW, 12)

22917 A handful of intransitive verbs can derive reciprocal forms. The verb of speech
 22918 *ruçmi* 'talk' has the derived form *a-ruçmu~çmi* 'exchange words, talk to each
 22919 other' (see example 101, §18.4.4), with reciprocation of the dative-marked re-
 22920 cipient (compare with 172, §8.3.1).

22921 18.4.1.1 Reciprocal and noun-verb collocations

22922 In some noun-verb collocations (§22.4.2), the verb can undergo the reduplicated
 22923 reciprocal derivation, expressing mutual action between the subject and the pos-
 22924 sessor of the object of the base construction.

22925 For instance, the collocation meaning 'braid hair' (78) including the verb *βzu*
 22926 'make' and the body part *tu-ku* 'head' (§5.1.2.3) yields in (79) a reciprocated
 22927 construction with the reduplicated verb *aβzuuβzu* and the noun *tu-ku* demoted as
 22928 semi-object.

- 22929 (78) *a-pi* *tu-ku* *nui-βzu-t-a*
 1SG.POSS-elder.sibling 3SG.POSS-head AOR-make-PST:TR-1SG
 22930 'I braided my sister's hair.' (elicited)

- 22931 (79) *u-pi* *c^ho* *ndzi-ku* *nui-γ-βzui-βzu-ndzi* *ndyre*,
 3SG.POSS-elder.sibling COMIT 3DU.POSS-head IPFV-RECIP-make-DU LNK
 22932 'She and her sister braided each other's hair.' (2005 Kunbzang, 260)

22933 18.4.1.2 Reciprocal and other derivations

22934 The reciprocal derivation is highly productive, can be applied to verbs that have
 22935 undergone a valency-increasing derivation such as causative (§17.2, §17.3), ap-
 22936 plicative (§17.4) or tropative (§17.5).

22937 Reciprocated causatives are found with both sigmatic and velar causative
 22938 verbs. For instance, the velar causative *yrrlaꝝ* 'destroy' (from the intransitive verb
 22939 *rlaꝝ* 'disappear', borrowed from རླା ད୍ରାଙ୍ଗ *brlag* 'lose') has a reciprocal form *ayrrlurlaꝝ*
 22940 'destroy each other' (80).

- 22941 (80) *kucunγuu* *tce, tyru* *ra tu-o-nuisnuŋuu~ŋab-nuu tce*
 former.times LNK chieftain PL IPFV-RECIP-do.harm-PL LNK
 22942 *c^hu-γ-yx-rlu~rlaꝝ-nuu* *pjy-ŋgryl*
 IPFV-RECIP-CAUS-disappear-PL IPFV.IFR-be.usually.the.case
 22943 'In former times, chieftains used to harm (murder) each other and destroy
 22944 each other's families.' (elicited)

Reciprocalization of sigmatic causatives is productive. Example (81) illustrates two verbs with this double derivation: *asunq^hunq^hi* ‘make each other dirty’ (from the causative *sunq^hi* ‘make dirty’ derived from *nq^hi* ‘be dirty’) and *asuyŋnayŋa* ‘blacken each other’ (from the causative *suŋŋa* ‘blacken’ from *ŋa* ‘be black’). In the latter, note that partial reduplication targets the syllable /ŋna/, disregarding morpheme boundaries (the /ŋ/ is part of the causative prefix, §17.2.1.4).

- (81) *jx-k-y-sui-nq^hur~nq^hi-ndzi* tce,
 IFR-PEG-RECIP-CAUS-be.dirty-DU LNK
jx-k-y-suŋŋayŋa-ŋa-ndzi-ci zo
 IFR-PEG-RECIP-CAUS-be.black-DU-PEG EMPH
 ‘They_{DU} made each other dirty, they blackened each other.’ (elicited, can
 be said of children playing in a dirty place)

The lexicalized verb *nusuk^ho* ‘rob, extort’ which etymologically derives from *k^ho* ‘give’ with the causative and autive prefixes (§17.2.3) can also undergo reciprocalization to *anusuk^huk^ho* ‘extort each other’ as in (82).

- (82) *nunu jx-k-yrryt* nuu *pjx-k-y-nusuk^hur~k^ho-nuu-ci.*
 DEM AOR-OBJ:PCP-throw DEM IFR.IPFV-PEG-RECIP-rob-PL-PEG
 ‘The beasts fought with each other to get the (piece of cloth) that he had
 thrown (at them).’ (150825 huluwa-zh, 150)

Reciprocalized tropatives are not commonly found in the corpus, but potentially any tropative verb can undergo reciprocal derivation. For instance, the slightly lexicalized tropative verb *nype* ‘consider to be good, like’ (from *pe* ‘be good’) yields *anypupe* ‘like each other’, as in (83).¹⁴

- (83) *jx-k-y-nynts^hur~nts^hi-ndzi-ci, jx-k-y-ny-pur~pe-ndzi* tce
 IFR-PEG-RECIP-love-DU-PEG IFR-PEG-RECIP-TROP-be.good-DU LNK
 ‘They fell in love with each other.’ (150827 mengjiangnv-zh, 104-105)

The reciprocal derivation is also completely productive with applicative verbs. For instance *nuybuy* ‘miss, long for’ (from *buy* ‘miss home’), *nŋk^hŋzŋga* ‘shout at’ (from *ak^hu* ‘call’) and *nurga* ‘like’ (from *rga* ‘like, be happy’) yield the reciprocal verbs *anuybuŋbuy* ‘miss each other’, *anŋk^hŋzŋgu~ŋŋga* ‘shout at each other’ and *anurgu~rga* ‘like each other’, respectively. In the case of *a-nuy-bu~ybuy*, partial reduplication disregards morpheme boundaries (the /ŋ/ that belongs to the

¹⁴The other verb *anynts^hunts^hi* ‘love each other’ in (83) derives from *nynts^hi* ‘love’, which is a lexicalized and synchronically non-analyzable tropative (§17.5.3).

applicative prefixes is reduplicated together with the verb root), as in the case of the reciprocal of causative *asuyŋyŋŋas* ‘blacken each other’ discussed above (§18.4.1.2).

A sigmatic causative derivation can be applied to a reciprocal verb. For instance, *awuwum* ‘gather together’ (see 75 in §18.4.1 above) yields the verb *s̥rwuwum* ‘gather’, whose meaning is close to that of the base verb *wum* ‘gather’ (see example 76 above and the related discussion), but lacking the extended meanings of this verb and more commonly used to express the meaning ‘gather’ with human objects.

- (84) *s̥runmuu ra cʰy-suu-y-wuu~wum tce,*
 râkshasî PL IFR-CAUS-RECIP-gather LNK
 ‘She gathered the râkhasîs together.’ (2011-05-nyima, 33)

Such double derivations are by no means rare. The causative+reciprocal *s̥tyuta* ‘separate’ (of two persons that are fighting with each other, as in 85) is considerably more commonly used than the simple reciprocal *atuita* ‘release each other’ (from *ta* ‘put’).

- (85) *pui-suu-y-tu-te-a ri tce myzii ku-o-ndur~ndo-ndzi*
 IPFV-CAUS-RECIP-put-1SG LNK LNK again IPFV:EAST-RECIP-take-DU
 _{cti}
 be.AFF:FACT
 ‘I am (repeatedly) separating them (two fighting ants), but they grab each other again (each time).’ (conversation 14-05-01)

The verb *asymumtsʰumtsʰym* ‘inform each other’, which presents two instances of the reciprocal derivation, is treated in (§18.4.2).

18.4.1.3 Lexicalized reciprocal

The meaning of reciprocal verbs is not always fully predictable from that of the base verb; some reciprocal verbs express naturally collective action (§18.4.1) and may have a meaning that is more restricted than that of the base verb.

In some cases, the meanings of the reciprocal form has changed to such an extent that the two verbs have become synchronically unrelated. The clearest example is the intransitive verb *alulyt* ‘fight’, which requires a non-singular subject and can select a comitative phrase (§8.2.5) as in (86), like regular reciprocal verbs (§18.4.1).

- 23003 (86) *bdutxpa kyrpu yuu w-tcui c^ho azo a-tcui nuu*
 ANTHR ANTHR GEN 3SG.POSS-son COMIT 1SG 1SG.POSS-son DEM
 23004 *ty-alulxt-ndzi tce, tce a-tcui yuu-sat pjy-ηu ri,*
 AOR-fight-DU LNK LNK 1SG.POSS-son INV-kill:FACT IFR.IPFV-be LNK
 23005 ‘Gdugpa dkarpo’s son and my son fought with each other, and my son
 23006 was about to be killed.’ (28-smAnmi, 253)

23007 This verb originates from the transitive verb *lxt* ‘release’, which is used as
 23008 a light verb in several collocations related to fight. In these constructions, the
 23009 syntactic object of *lxt* is the instrument used to hit or shoot, such as weapons
 23010 (*scapa* ‘sword’, *tudi* ‘arrow’, *cymuydu* ‘gun’ etc) or body parts (*tyjk^hut* ‘fist’ etc)
 23011 as objects (87, 88 and also 210 in §8.3.4.3), while the semantic patient (the entity
 23012 that is hit or shot at) is marked by the relator noun *w-tar* ‘on’ (§8.3.4.3).

- 23013 (87) *nunuu cymuydu tu-lxt-nuu tce pjuu-sat-nuu cti.*
 DEM gun IPFV-release-PL LNK IPFV-kill-PL be.AFF:KILL
 23014 ‘They shoot at it with guns and kill it.’ (28-qapar, 20)
- 23015 (88) *qac^hya w-tar zo li tudi nuu ci to-lxt.*
 fox 3SG.POSS-on EMPH again arrow DEM INDEF IFR-release
 23016 ‘He too shot an arrow at the fox.’ (140507 jinniao-zh, 82)

23017 The reciprocal derivation here originally expressed mutual action between the
 23018 subject and the oblique argument (marked by *w-tar* ‘on’) of the base verb; the
 23019 original meaning may have been ‘shoot at/hit each other (with X)’, and it can be
 23020 surmised that the verb *alulxt* ‘fight’ used to require a semi-object corresponding
 23021 to the instrument used for hitting/shooting at an earlier stage. The verb *alulxt*
 23022 became fully lexicalized when it ceased to co-occur with a semi-object, and when
 23023 its meaning became narrowed to the meaning ‘fight’, as opposed to all the other
 23024 possible meanings of the light verb *lxt* (§22.4.2.2).

23025 In some cases, the base verb does not exist anymore but its possible form can
 23026 be easily recovered. For instance, the reciprocal *anurjyruru* ‘look at each other’s
 23027 face’ (example 89) is derived from a lost base verb *tnurjyruru*, an incorporating
 23028 verb made from the intransitive *ru* ‘look at’ (§15.1.2.4) and the nominal root of
 23029 *tuu-rja* ‘face’, with the denominal prefix *nuu-* (§20.13.2).

- 23030 (89) *nunuu c^ho ci ky-anurjyruru-ndzi tce*
 DEM COMIT a.little AOR-look.at.each.other-DU LNK
 23031 ‘They exchanged a look with each other.’ (2010-07, pear story)

Finally, we find a few intransitive verbs that resemble reciprocal verbs formally (presence of *a-* prefix and verb stem reduplication) and syntactically (non-singular subject, select comitative phrases), but whose verb root is not otherwise attested in Japhug: *amumi* ‘be in good terms with’ (§8.2.5), *azuzu* ‘wrestle’ and *asusu* ‘copulate’ (the latter perhaps related to *susu* ‘live’).

18.4.2 Reciprocal *amu-* prefix

In addition to the reduplicated reciprocal (§18.4.1), a second reciprocal pattern is attested in Japhug: the prefix *amu-*. As shown by the examples in Table 18.3, the *amu-* prefix can derive reciprocal verbs from ditransitive, transitive, semi-transitive and intransitive verbs. When prefixed to *a-* initial verbs such as *atuy* ‘meet’, no vowel contraction takes place (the reciprocal is *amutuy* ‘meet each other’ rather than *†amytuy* as could have been expected).

Table 18.3: Examples of the *amu-* reciprocal prefix

	Base verb	Reciprocal verb
indirective	<i>ti</i> ‘say’	<i>amuti</i> ‘say to each other’
	<i>st^haβ</i> ‘put against’	<i>amust^haβ</i> ‘be one against the other’
	<i>rpu</i> ‘bump’	<i>amurpu</i> ‘bump against each other’
mono-transitive	<i>mto</i> ‘see’	<i>amumto</i> ‘see each other’
	<i>mts^hym</i> ‘hear’	<i>amumts^hym</i> ‘hear each other’
semi-transitive	<i>tso</i> ‘know, understand’	<i>amutso</i> ‘understand each other’
	<i>atuy</i> ‘meet’	<i>amutuy</i> ‘meet each other’
intransitive	<i>fse</i> ‘be like’	<i>amufse</i> ‘know each other’
	<i>armbat</i> ‘be near’	<i>amurmbat</i> ‘be close to each other’
	<i>arq^hi</i> ‘be far’	<i>amurq^hi</i> ‘be far from each other’

The verbs that are compatible with *amu-* derivation can be divided into four groups: indirective, perception, semi-transitive and stative.

18.4.2.1 *amu-* reciprocalization of indirective verbs

Indirective verbs (§14.4.1) such as *ti* ‘say’ become semi-transitive (§14.2.3) when subjected to the *amu-* reciprocal derivation.

23049 The reciprocal verb *amuti* ‘say to each other’ is compatible with a semi-object
 23050 (noun phrase or reported speech complement clause as in 90 and 91) correspond-
 23051 ing to the object of the base verb. The reciprocal derivation here expresses mu-
 23052 tual action between the subject and the dative recipient of *ti* ‘say’.

- 23053 (90) *'nuutcu tuu-ci* *z-puu-kui-suu-y-j-ts^{hi}*
 23054 DEM:LOC INDEF.POSS-water TRAL-IPFV-GENR:S/O-CAUS-PASS-CAUS-drink
puu-nts^{hi}' *to-k-ymua-ti-ndzi*
 23055 SENS-be.better IFR-PEG-RECIP-say-DU
 23056 ‘They said to each other ‘we should go there and ask for water to drink.’
 (Nyima wodzer 2002, 59)

23057 Example (91) illustrates the use of this reciprocal verb with a generic person
 23058 form, with neutralization of number marking (the verb otherwise always has
 23059 non-singular number indexation in finite forms).¹⁵

- 23060 (91) *numuu kyndzi-sq^haj uu-rj^{it}* *nuu tce “a-mytsa”*
 23061 DEM COLL-sister 3SG.POSS-offspring DEM LNK 1SG.POSS-MZCh
tu-kui-ymua-ti *nuu-ŋu.*
 23062 IPFV-GENR:S/O-RECIP-say SENS-be
 23063 ‘Children of sisters call each other ‘my maternal parallel cousin.’ (140425
 kWmdza4, 5)

23064 The reciprocal *amu-* prefix expresses reciprocity between the subject and other
 23065 oblique arguments, for instance those marked by the relator noun *uu-tar* ‘on,
 23066 above’ (§8.3.4.3). For instance, the verb *amuust^haβ* ‘be one against the other’ (92)
 23067 is derived from *st^haβ* ‘put against’, a ditransitive verb which selects a phrase in
 23068 *uu-tar* (93).

- 23069 (92) *tce numuu li bγb^hbγβ* *zo kui-pa tce,*
 23070 LNK DEM again IDPH(II):growing.in.clumps EMPH SBJ:PCP-AUX LNK
kui-ymuu-st^huu~st^haβ *zo kui-dyn tu-lor*
 23071 SBJ:PCP-RECIP-EMPH~put.against EMPH SBJ:PCP-be.many IPFV-come.out
ŋu.
 23072 be:FACT
 23073 ‘(These mushrooms) grow in clumps, one against the other in great
 numbers.’ (23-mbrAZim, 9)

¹⁵Concerning the kinship rule described in (91), see §27.2.3.

- 23074 (93) *ma numuu uzzo vja [tu-mdzu u-taŋ]*
 LNK DEM 3SG completely GENR.POSS-tongue 3SG.POSS-on
 23075 *kú-wy-st^haβ tce myrtsaβ,*
 IPFV-INV-put.against LNK be.spicy:FACT
 23076 ‘If one puts it (this plant) on one’s tongue (without anything else), it is
 23077 spicy.’ (13-tCamu, 13)

23078 The verb *amurpu* ‘bump one against the other’ is a similar case (see example
 23079 3, §6.1), but its base verb *rpu* ‘bump against’ is labile (§14.5.2).

23080 18.4.2.2 *amu-* reciprocalization of perception verbs

23081 The perception verbs *mto* ‘see’, *mts^hym* ‘hear’ are also compatible with the *amu-*
 23082 prefix. Unlike the indirective verbs discussed in §18.4.2.1 their reciprocal forms
 23083 *amumto* ‘see each other’ and *amumts^hym* ‘hear from each other’ (or ‘hear each
 23084 other’) express reciprocal action between the subject (experiencer) and the ob-
 23085 ject (stimulus) of the base verb. As shown by (94), these verbs also select the
 23086 comitative like other reciprocal forms.

- 23087 (94) *<liangshanbo> c^hondyre pjui-ymui-mto-ndzi mui-pjy-jy* tce
 ANTHR COMIT IPFV-RECIP-see-DU NEG-IFR.IPFV-be.allowed LNK
 23088 ‘She and Liang Shanbo were not allowed to see each other.’ (150826
 23089 liangshanbo zhuyingtai-zh, 164)

23090 18.4.2.3 *amu-* reciprocalization of semi-transitive verbs

23091 In the case of the semi-transitive verbs *tso* ‘know, understand’ and *atuy* ‘meet’,
 23092 the *amu-* derivation targets the semi-object.

23093 The verb *amutso* can be used with the reciprocal meaning of ‘understand each
 23094 other’ (95), but also has an additional meaning ‘be clear, be understandable (of
 23095 speech)’, reflecting the homophonous *amu-* distributed property derivation (§18.7).
 23096 As discussed in §18.7, the reciprocal and distributed property *amu-* prefixes are
 23097 historically related, and the verb *amutso* is one of the pivot forms between them.

- 23098 (95) *kupa-skrt tú-wy-βzu tce numuu a-pui-ηu, izo yu*
 Chinese-language IPFV-INV-make LNK DEM IRR-IPFV-be 1SG GEN
 23099 *<guoyu> pui-ηu tce, numuu kysufse yu ji-rju*
 national.language SENS-be LNK DEM all GEN 1SG.POSS-speech

nua-ŋu tce, pjua-kua-ŋmu-tso *nua-ra* *ri, li*
SENS-be LNK IPFV-GENR:S/O-RECIP-understand SENS-be.needed LNK again
nua kogla müj-tso-nua.
DEM completely NEG.SENS-understand-PL
'When we speak Chinese, since it is our national language, everybody's language, we should be able to understand each other, but (the people from Tshobdun) do not understand it completely either.' (150901 tshuBdWnskAt, 15-17)

18.4.2.4 *amu-* reciprocalization of stative verbs

The *amu-* prefix occurs with a few stative verbs. The stative verbs of relative location *armbat* ‘be near’ and *arq^{hi}* ‘be far’ have the reciprocal forms *amurmbat* ‘be close to each other’ and *amurq^{hi}* ‘be far from each other’. In (96), *amurmbat* appears in singular form due to the inanimate character of the stars and their poor differentiability from each other with a naked eye.

- (96) *zŋgri wuma kui-tṣot* *jui-maṛ* *ri*,
 star really SBJ:PCP-be.bright SENS-not.be LNK
 23113 *kui-ymui-rmbat* *zo* *jui-ju* *tce*, *nui* *wuma jui-saxsyl*.
 SBJ:PCP-RECIP-EMPH~be.near EMPH be:FACT LNK DEM really SENS-be.clear
 23114 [...] *wu-tuu-yzirja* *wi-ts^huya* *nui*, [...] *vnymchi*
 3SG.POSS-NMLZ:DEG-be.aligned 3SG.POSS-shape DEM gnam.khyi
 23115 *tsa* *jui-fse*, [...] *ri* *jui-ymui-rmbat*.
 a.little be.like:FACT LNK SENS-RECIP-be.near
 23116 '(There six stars in the Pleiades.) They are not very bright stars, but they
 23117 are close to each other, and for this reason they are quite visible. The way
 23118 they are aligned is a bit similar to that of the constellation Gnam.khyi,
 23119 but closer to each other.' (29-mWBZi, 15-20)

The verb *amufse* ‘know each other’ (example 97) historically originates from the *amu-* reciprocal form of a base *-fse*, which is not related to the intransitive stative verb *fse* ‘be like’, but rather to a lost verb corresponding to the Tshobdun verb *fse?* ‘hear’ (Sun & Blogros 2019: 213). The isolated derivation *nufse* ‘know’ (a person) (possibly a lexicalized autive §19.1.6) is derived from the same base with the same meaning; it also has a Tshobdun cognate: *náfse* ‘know well’ (Sun & Blogros 2019: 121).

- 23127 (97) *nure ri tce ky-amufse-tci tce, tcendyre wuma zo*
DEM:LOC LOC LOC AOR-know.each.other-1DU LNK LNK really EMPH
23128 *pui-amumi-tci*
PST.IPFV-be.in.good.terms-1DU
23129 ‘We got to know each other there, and we were in very good terms.’
23130 (12-BzaNsa, 6)

23131 Some reciprocal verbs derived either from dynamic transitive verbs (*amustʰaqβ*
23132 ‘be one against the other’ in 92) or from stative verbs (*amurmbat* ‘be close to each
23133 other’ in 96) are stative, and often appear with emphatic reduplication. This redu-
23134 plication is different from that of reduplicated reciprocal verbs (§18.4.1), which is
23135 one of the morphological exponents of that reciprocal formation.

23136 18.4.2.5 Causativivization of *amu-* reciprocal verbs

23137 The sigmatic causative can be added to *amu-* reciprocal verbs. For instance, *amumto*
23138 ‘see each other’ discussed above yields the causative form *symumto* ‘cause to see
23139 each other’, which also selects the comitative like its base verb,¹⁶ as shown by
23140 (98).¹⁷

- 23141 (98) *jo-suu-ye tce icqʰa <gengqubing> nuu cʰo*
IFR-CAUS-COME LNK the.aforementioned ANTHR DEM COMIT
23142 *pjx-suu-ymui-mto.*
IFR-CAUS-RECIP-SEE
23143 ‘The (old man) brought them in and had them meet Geng Qubing.’
23144 (150906 qingfeng-zh, 58)

23145 The verb *asymumtsʰumtsʰym* ‘inform each other’ underwent three derivations
23146 from the base verb *mtsʰym* ‘hear’: *amu-* reciprocal derivation (*amumtsʰym* ‘hear
23147 from each other’), sigmatic causative (*symumtsʰym* ‘cause to hear from each other’)
23148 and then finally the reduplicated reciprocal derivation (*a-symumtsʰu~mtsʰym*,
23149 §18.4.1.2). Unlike the non-volitional reciprocal verb *amumtsʰym* ‘hear from each
23150 other’ from which it is derived, *asymumtsʰumtsʰym* is a verb of speech, and ex-
23151 presses a volitional action (see 99 below and 7 in §5.1.1.3).

¹⁶The Chinese original passage from which (98) is translated is 老翁便领着那两个少男女出来与耿去病见面 <lǎowēng biàn lǐngzhe liǎngge shàonánн chūlái yǔ Gěng Qùbìng jiànmiàn> ‘The old man then brought the girl and the boy to meet with Geng Qubing’, and the presence of comitative could in principle be an effect of calquing of the preposition 与 <yǔ> ‘with’, but additional elicitation has confirmed that this construction is grammatically correct.

¹⁷The absence of plural indexation in (98) is expected since in direct 3→3' forms only the number of the subject is indexed on the verb (§14.3.2.2).

- 23152 (99) *wzo kuu w-zda tui-rdo& w-p^he ta-tuit,*
 3SG.ERG 3SG.POSS-companion one-piece 3SG.POSS-DAT AOR:3→3'-say
- 23153 *tui-zda kuu li ci w-zda nuu*
 INDEF.POSS-companion ERG again INDEF 3SG.POSS-companion DEM
- 23154 *w-p^he kuu-fse c-ta-tuit ny, [...] yurza*
 3SG.POSS-DAT SBJ:PCP-be.like TRAL-AOR:3→3'-say ADD hundred
- 23155 *kurcat nuu z-nuu-a-su-ymuu-mts^hu-mts^hm-nuu jnu-ŋu,*
 eight DEM TRAL-AOR-RECIP-CAUS-RECIP-hear-PL SENS-be
- 23156 ‘The boy told one of his companions, and that one went and told another
 one, and all one hundred and eight (boys) went and informed each other.’
- 23157 (2005 Norbzang, 89-90)

23159 The first two clauses in (99) provide a native gloss on the meaning of this
 23160 reciprocal verb.

23161 18.4.3 Reciprocal *andzwi-* prefix

23162 The transitive verb *bri* ‘protect’ (an irregular causative of *ri* ‘remain’, see §17.3.1),
 23163 has the reciprocal *andzwi**bri*** ‘protect each other’ with the unique *andzwi-* prefix,
 23164 historically related to the denominal *andzi-* (§20.2.5; on the difficult question of
 23165 the /i/ vs. /u/ contrast in this context, see §3.5.2).

- 23166 (100) *tcizo andzwi-βri-tci ra*
 1DU RECIP-protect:FACT-1DU be.needed:FACT
 23167 ‘The two of us have to look out for each other.’ (elicited)

23168 18.4.4 Verbs of co-participation

23169 The compound verb *amyrk^ho* ‘give and take’, which derives from the transitive
 23170 verbs *mja* ‘take’ and *k^ho* ‘give’ (§19.7.3, §14.4.1) is not formally reciprocal but im-
 23171 plies an action performed by more than one person. Contrary to a reciprocal or a
 23172 reflexive, this collective action is not mutual or directed towards oneself: rather,
 23173 it expresses that two distinct actions performed by different referents take place
 23174 (near-)simultaneously and are linked with one another. Example (101) illustrates
 23175 that one of the two people referred to by the third dual subject hands over the
 23176 child (a semi-object, §8.1.5) and that the other person takes the child from her
 23177 hands. Note the non-iconic order in the compound, where the root *mja* occurs
 23178 before *k^ho*, also the action of giving necessarily temporally precedes that of tak-
 23179 ing.

- 23180 (101) *tceri t̪r-rfit* *nur jnu-ymfyrk^ho-ndzi* *q^he kojla*
 LNK INDEF.POSS-child DEM IPFV-give.and.take-DU LNK really
 23181 *tu-o-nur-ruucmu~cmi-ndzi kumy māj-tsu* *ma tce li*
 IPFV-RECIP-talk-DU also NEG:SENS-have.time.to LNK LNK again
 23182 *tú-wy-nu-cti.* *jnu-cti.*
 IPFV:UP-INV-VERT-take.away SENS-be:AFF
 23183 ‘She_i hands the child_j to him_k and he_k takes him_j, but they_{i+k} don’t get
 23184 the time to exchange any words and she_i is taken back to heaven.’
 23185 (150828 donglang, 174-175)

23186 Despite the presence of a reciprocal verb *a-ruucmu~cmi* ‘talk to each other’
 23187 (§18.4.1) in this passage, since there is no exchange of roles in the compound
 23188 action described by the verb *amfyrk^ho* ‘give and take’, it is preferable to refer to
 23189 this type of construction as ‘co-participation’ (more precisely, ‘unspecified co-
 23190 participation’ in Creissels and Voisin’s 2008 terminology). This verb is isolated,
 23191 as none of the other compound verbs recorded up to now have a meaning of this
 23192 type.

23193 18.5 Anticausative

23194 18.5.1 Morphology

23195 18.5.1.1 Prenasalized-unvoiced alternation

23196 Voice derivations in Japhug are mainly concatenative and prefixal. An important
 23197 exception is the alternation between unvoiced stops/affricates and their voiced
 23198 prenasalized counterparts (which are to be analyzed as single phonemes, §3.2.1),
 23199 reflected in verb pairs whose unvoiced member is transitive, and whose voiced
 23200 prenasalized member is intransitive.

23201 There are 28 known examples of this alternation, involving both unvoiced
 23202 unaspirated stops/affricates (Table 18.4) and aspirated stops/affricates (Table 18.5).
 23203 In Table 18.4, the verb *nungṛt* ‘part ways’ has a lexicalized autive *nu-* integrated
 23204 in the verb stem (§19.1.6), but the bare stem *ngṛt* is found in nominalized forms
 23205 such as *w-sṛ-ngṛt* ‘place where X part ways’ (§5.5.1.1).¹⁸

23206 In the absence of a clearly identifiable derivational affix, the direction of the
 23207 derivation is not completely obvious. It is conceivable in principle that the intransi-

¹⁸The verb pairs *xt^hom* ‘put horizontally’ / *ndom* ‘lie horizontally’ and *ftṣi* ‘melt’ (vt) / *ndz̪i* ‘melt’, which have a cluster in the transitive form but a single prenasalized stop in its intransitive counterpart, are discussed in §18.5.1.3.

Table 18.4: Prenasalized anticausative verbs from unaspirated roots (20 examples)

transitive verb	intransitive verb
<i>plut</i> ‘destroy’	<i>mblut</i> ‘be destroyed’
<i>pryt</i> ‘break’ (vt, of thread)	<i>mbryt</i> ‘break’ (vi)
<i>pri</i> ‘tear’	<i>mbri</i> ‘be torn’
<i>pyaꝝ</i> ‘turn over’ (vt)	<i>mbyaꝝ</i> ‘turn over’ (vi)
<i>χtyr</i> ‘scatter’	<i>ndy̥r</i> ‘be scattered’
<i>tçyβ</i> ‘burn’ (vt)	<i>ndzr̥yβ</i> ‘be burned’
<i>tçyaꝝ</i> ‘squeeze out’	<i>ndzyaꝝ</i> ‘be squeezed out’
<i>tçaqβ</i> ‘cause to fall/roll’	<i>ndzq̥β</i> ‘fall/roll’ (vi)
<i>ft̥si</i> ‘melt’ (vt)	<i>ndz̥i</i> ‘melt’ (vi)
<i>cuu</i> ‘open’ (vt)	<i>nju̥</i> ‘open’ (vi)
<i>kry</i> ‘bend’	<i>ŋgr̥y</i> ‘be bent’
<i>kio</i> ‘cause to glide’	<i>ŋgio</i> ‘slip’, ‘glide’
<i>kra</i> ‘cause to fall’	<i>ŋgra</i> ‘fall’
<i>qaꝝ</i> ‘peel off’ (vt)	<i>NGaꝝ</i> ‘peel off’ (vi)
<i>qyt</i> ‘separate’ (vt)	<i>nungr̥t</i> ‘part ways’
<i>qia</i> ‘tear down’	<i>ngia</i> ‘come loose’
<i>qlut</i> ‘break’ (vt, of long objects)	<i>nghlut</i> ‘break’ (vi)
<i>qr̥aꝝ</i> ‘tear’	<i>NGraꝝ</i> ‘be torn’
<i>qr̥yz</i> ‘shave’	<i>NGryz</i> ‘break’ (vi, of hair, dry leaves etc)
<i>qr̥uu</i> ‘break’ (vt, of hard objects)	<i>NGruu</i> ‘break’ (vi)

23208 sitive verbs in Tables 18.4 and 18.5 are derived from their transitive counterparts,
 23209 but the opposite direction is equally possible.

23210 The latter direction could even seem more likely when looking at the mean-
 23211 ing of some of the transitive verbs in these tables from a West European-cum-
 23212 Chinese perspective: for instance, the meaning of *kra* ‘cause to fall’ has to be
 23213 glossed in a way that makes it seem like it is derived from the intransitive verb
 23214 *ŋgra* ‘fall’.

23215 A cognate phenomenon is well-known in other branches of the Trans-Hima-
 23216 layan family such as Old Chinese, Tibetan and Lolo-Burmese, and several tra-
 23217 ditions of research analyse these cases as devoicing of the voiced initial by the

Table 18.5: Prenasalized anticausative verbs from aspirated roots (8 examples)

transitive verb	intransitive verb
<i>pʰaʂ</i> ‘split’ (vt)	<i>mbaʂ</i> ‘split, break’ (vi)
<i>w-ʂo + pʰi</i> ‘be disappointed by’	<i>w-ʂo + mbi</i> ‘be discouraged’
<i>sʂpʰyr</i> ‘wipe off’	<i>mbʂr</i> ‘be wiped off’
<i>tʰw</i> ‘built’ (road, bridge)	<i>ndu</i> ‘be spread’ (road, bridge)
<i>xtʰom</i> ‘put horizontally’	<i>ndom</i> ‘lie horizontally’
<i>tsʰor</i> ‘attach’	<i>ndzɔʂ</i> ‘be attached’
<i>cʰyʂ</i> ‘flatten, crush’	<i>nyxʂ</i> ‘be crushed, flattened’
<i>qʰruʂ</i> ‘completely scratch’	<i>ngrut</i> ‘be completely scratched’

23218 sigmatic causative prefix (for instance Shefts-Chang 1971; Dài 1994; Gerner 2007)
 23219 while other scholars argue for the opposite direction (Sagart & Baxter 2012; Jacques
 23220 2012b; see a summary of several opinions on this matter in Handel 2012).

23221 18.5.1.2 Evidence for the directionality of the anticausative derivation

23222 In Japhug (and other Gyalrong languages), three independent pieces of evidence
 23223 clearly indicate that the direction of derivation must be from the transitive verb
 23224 to the intransitive one.

23225 First, the transitive verbs in these pairs can have either unaspirated onset (see
 23226 the examples in Table 18.4) or an aspirated onset (Table 18.5). In the hypothesis
 23227 that the intransitive verbs derive from their transitive counterpart, this obser-
 23228 vation can be trivially explained: the aspiration contrast is neutralized by the
 23229 prenasalization, as illustrated in Table 18.6 (some of the aspirated affricates are
 23230 indicated in brackets in this table, as no examples are attested).

23231 On the other hand, in the hypothesis that the intransitive verbs are primary,
 23232 the origin of aspiration contrast on the transitive counterparts requires an addi-
 23233 tion set of explanations.

23234 Second, the verb *χtʂr* ‘scatter’ (Table 18.4) is borrowed from Tibetan གྲରྙ: *gtor*
 23235 ‘scatter’. The prenasalized form *ɛndʂr* ‘be scattered’ has no Tibetan equivalent,
 23236 and its onset *ɛnd-* is incompatible with the phonotactics of Tibetan consonant
 23237 clusters. Thus, this intransitive verb must be a Gyalrong-internal creation from
 23238 a Tibetan base,¹⁹ and it follows that the direction of derivation should be from
 23239 the transitive verb to the intransitive one.

¹⁹Cognate pairs also exist in Zbu (*χtór* / *ʂn̥dóʂ*, Gong 2018: 271) and in Tshobdun (*χtor* / *ʂn̥dor*,

Table 18.6: Prenasalization and aspiration neutralization

$p-, p^h-$	$\rightarrow mb-$
$t-, t^h-$	$\rightarrow nd-$
$ts-, ts^h-$	$\rightarrow ndz-$
$tc-, (tc^h)$	$\rightarrow ndz-$
$tʂ-, (tʂ^h)$	$\rightarrow ndʐ-$
$c-, c^h-$	$\rightarrow ny-$
$k-, k^h-$	$\rightarrow ng-$
$g-, g^h-$	$\rightarrow NG-$

Third, all scholars favouring the hypothesis that the intransitive verb is primary suppose that the onset of transitive verbs has been devoiced by the addition of a sigmatic causative. In Japhug, this hypothesis makes no sense, because the sigmatic causative (§17.2) is not only attested but fully productive (§17.2.1), with a considerable number of allomorphs but without ever devoicing either sonorant nor obstruents onsets.²⁰ In addition, causativization of prenasalized verbs is attested in Japhug (§18.5.6) and other Gyalrong languages such as Tshobdun (Sun 2014a), for instance *suy-ndzi* ‘melt (vt)’ from *ndzi* ‘melt’ (vi) (compare with the transitive *ftʂi* ‘melt’ vt).

Since the intransitive verbs in Tables 18.4 and 18.5 have a non-volitional meaning (§18.5.2), it is likely that the prenasalization is a fossilized form of the autative *nu-* prefix (§19.1.7) in its ‘spontaneous event’ function, like the isolated case of prenasalization in the verb pair *sqlum* ‘collapse’ vs. *arnqlum* ‘be caved in’ (§19.7.9).

While traces of the voicing (prenasalization) alternation can be brought to light in most languages of the Trans-Himalayan family, Japhug and the other Gyalrong languages are the only branch of the family where the origin of this alternation is still visible. The study of the prenasalization derivation in Japhug is thus of considerable interest for comparative Trans-Himalayan.²¹

Sun & Blogros 2019: 345; 241), showing that this derivation goes back at least to the common ancestor of these three languages.

²⁰The same is incidentally true of various other languages of the Trans-Himalayan family, including Tibetan (Jacques 2012b; Hill 2014a) and Jinghpao (Dài & Xú 1992: 78), where anticausative derivation also exists.

²¹Independent evidence against the hypothesis that the voicing alternation originates from sigmatic prefixation is also found in Tibetan (Jacques 2020). Further evidence in Gyalrongic is provided by Gates et al. (to appear).

18.5.1.3 Absence of clusters in the anticausative form

Among the pairs in §18.5.1.1, two verbs stand out in having a preinitial consonant in the transitive form without equivalent in the intransitive one: *ftsi* ‘melt’ (vt), with a *f*- (phonologically /w/) prefixal element (the expected form of the intransitive *ndzi* ‘melt’ would be †*mdzi*) and *xt^hom* ‘put horizontally’ with a *x*- element (the expected form of *ndom* ‘lie horizontally’ would be †*yndom*).

No decisive explanation can be provided to account for this idiosyncrasy, found in other Gyalrongic languages including Tangut. Two mutually incompatible hypotheses can be considered. First, it is possible that in these two pairs both the intransitive and the transitive verbs are derived from a common root with different fossil derivational prefixes. Second, the reconstructed nasal prefix responsible for the anticausative prenasalization might have caused cluster simplification (**N-pti* → **N-tri* → *ndzi*).

In the second hypothesis, the anticausative form *bndyr* ‘be scattered’ from the Tibetan loanword *χtsr* ‘scatter’ would be phonetically irregular, possibly a clue of it being analogically created on the basis of other anticausative derivations.

18.5.2 Function

The discussion in the previous section has shown that the transitivity alternation exhibited by the verb pairs in Tables 18.4 and 18.5 was a valency-decreasing derivation, turning a transitive verb with unvoiced obstruent onset into an intransitive verb with voiced prenasalized onset (following the rules in Table 18.6).

Like the passive (§18.1), the only argument of the prenasalized intransitive verb corresponds to the object of the base verb. Unlike the passive derivation however, prenasalized intransitive verbs have a dynamic meaning (rather than expressing a resultative state) and also imply that the action took place spontaneously, semantically removing the agent. For instance, while the passive *a-pryt* of the verb *pryt* ‘break’ (of a thread) implies the existence of an agent (102), the prenasalized intransitive *mbryt* expresses a spontaneous action without external agent (103).²² For this reason, this derivation is henceforth referred to as ‘anticausative’.

²²The anticausative meaning of the prenasalization derivation is a plot device in (103). The context of this sentence is that the queen arrives in a room whose floor is tiled with turquoise and coral (see example 277, §19.7.9), and unsure whether it is safe to walk on it (worrying that it might yield under her weight), she willfully breaks her necklace, spreading the pearls on the floor. Her servants, unaware that she did it on purpose, enter the room first to pick up the pearls, and seeing that the floor does not collapse, she then follows them.

- 23288 (102) *pjy-k-y-pryt-ci*
 IFR-PEG-PASS-break-PEG
 23289 ‘It has been broken (by someone).’
- 23290 (103) *wo a-zi ra nui-mkyyur pui-mbrxt*
 INTERJ 1SG.POSS-lady PL 3PL.POSS-necklace AOR-ACAUS:break
 23291 ‘My lady, your necklace broke!’ (2003 Kunbzang, 255)

23292 While anticausativized verbs are not compatible with external volitional agents,
 23293 they are however attested with an explicit expression of the cause and/or of an
 23294 involuntary and indirect agent. For instance in (104) the capsizing of the ship
 23295 (expressed by the anticausative *mbya_v* ‘turn over’ (vi) from *pya_v* ‘turn over’ (vt))
 23296 is due to a storm mentioned in the previous clause, however without explicit
 23297 marking of the causal relationship.

- 23298 (104) *ndzi-zmbru_v c^hy-mbya_v.*
 3DU.POSS-boat IFR:DOWNSTREAM-ACAUS:turn.over
 23299 ‘(One day, there was a terrible storm on the ocean, and) their boat
 23300 capsized.’ (140511 xinbada-zh, 18)

23301 In (105), the anticausative *ngru_v* ‘break’ (vi) occurs even though the human
 23302 subject of the preceding clause is the identified agent of the verb *pjy-nui-ctluy*
 23303 ‘she dropped it’ and the involuntary indirect cause of the breaking action.

- 23304 (105) *popo pjy-nui-ctluy tce, pjy-ngru_v.*
 earthenware IFR-AUTO-DROP LNK IFR-ACAUS:break
 23305 ‘She dropped the earthenware and it broke.’ (2003gesar, 329)

23306 Anticausatives verbs can also follow their corresponding base transitive verbs,
 23307 as illustrated by the pair *qlut* ‘break’ (of long objects, vt) and *nqlut* ‘break’ (vi)
 23308 in (106). Instead of non-volitional action, what the anticausative *nqlut* expresses
 23309 in this case is the successful realization of the action: the subject of *qlut* controls
 23310 his decision to attempt at breaking an object, but cannot control his success in
 23311 performing this action.

- 23312 (106) *pju_v-tui-qlut q^he pju_v-nqlut nui-cti.*
 IPFV-CONV:IMM-break LNK IPFV-ACAUS:break SENS-be.AFF
 23313 ‘(Twigs of willow that grow in lower altitude) break as soon as one
 23314 breaks it.’ (07-Zmbri, 6)

23315 **18.5.3 Anticausative and dummy subject constructions**

23316 The verb *ts^hoꝝ* can be used as a prototypical transitive verb with the meaning
 23317 ‘attach, plant’, as in (107) (see also 63, §19.4) or ‘fix’ (something on something
 23318 else).

- 23319 (107) *fsaŋ c-pju-ta-nuu ḡu. tce lojrt̥a ra*
 fumigation TRAL-IPFV-put-PL be:FACT LNK prayer.flag PL
 23320 *c-tu-ts^hoꝝ-uu*
 TRAL-IPFV-attach-PL
 23321 ‘(In the morning of the first day of the year) People go (there) and make
 23322 fumigation, plant prayer flags...’ (140522 Kamnyu zgo, 308-309)

23323 It is also one of the few transitive verbs to occur in the dummy subject con-
 23324 struction (§14.3.5) in the meaning ‘grow’ (of fruits, leaves and flowers), as in (108).

- 23325 (108) *tce tui-k^hyl nułcu, χsui-cyβ, kułde-cyβ jamar ku-ts^hoꝝ*
 LNK one-place DEM:LOC three-pod four-pod about IPFV-attach
 23326 ‘In each place (in each section on the stalk of the plant), three or four
 23327 pods grow.’ (09-stoR, 42)

23328 The anticausative *ndzoꝝ* ‘be attached’ occurs with exactly the same meaning as
 23329 *ts^hoꝝ* ‘attach’ in the dummy subject construction. In (109), the intransitive subject
 23330 *żnui-cyβ, χsui-cyβ* ‘two or three pods’ of *ndzoꝝ* corresponds to the object *χsui-cyβ,*
 23331 *kułde-cyβ* of *ts^hoꝝ* in (108).

- 23332 (109) *tui-k^hyl ri, żnui-cyβ, χsui-cyβ jamar ku-ndzoꝝ c^ha*
 one-place LNK two-pod three-pod about IPFV-ACAUS:attach can:FACT
 23333 ‘In each place (section on its stalk), two or three pods can grow.’
 23334 (09-stoR, 35)

23335 This is not the only use of *ndzoꝝ*, which is one of the few anticausatives that
 23336 are compatible with a volitional meaning (compare with 119, §18.5.5).

23337 **18.5.4 Collocation**

23338 Among the pairs in Table 18.4, the verbs *w-ꝝo+p^{hi}* ‘be disappointed by’ and *w-ꝝo+m^{bi}* ‘be discouraged’ are remarkable in that both are noun-verb collocations,
 23339 taking the same inalienably possessed noun *w-ꝝo* (otherwise unattested) as object

23341 or intransitive subject,²³ Showing that the anticausative prenasalization, like se-
 23342 several other derivations (§22.4), affects collocations as a whole despite being only
 23343 morphologically expressed on the verb stem.

23344 The intransitive *mbi* ‘be discouraged, feel frustrated, lose heart’ is always in
 23345 3SG form (§14.2.7), and the possessor on *w-BO* indicates the experiencer, as in (110)
 23346 where the form *ndzi-BO* takes a 2DU possessive prefix coreferent with the subject
 23347 of the previous verb (see also 31 in §14.2.7).²⁴

- 23348 (110) *stvβtsʰyt mur-pui-tui-nui-cʰa-ndzi cti tce,*
 contest NEG-AOR-2-AUTO-can-DU be.AFF:FACT LNK
 23349 *ndzi-BO a-my-nui-mbi*
 2DU.POSS-disappoint(1) IRR-NEG-PFV-ACAUS:disappoint(2)
 23350 ‘(It is not that I don’t want to give her to you), it is that you failed in the
 23351 contest, don’t feel frustrated.’ (2003sras, 118)

23352 The transitive verb *pʰi* occurs with the meaning ‘disappoint’, encoding the stim-
 23353 ulus as transitive subject and the experiencer as possessor of the object as in (111).
 23354 The argument structure of the two verbs thus only differs by the loss of the sub-
 23355 ject (stimulus) in the intransitive form *mbi* meaning ‘be disappointed’.

- 23356 (111) *a-BO pui-tui-pʰi*
 1SG.POSS-disappoint(1) SENS-2-disappoint(2)
 23357 ‘I am disappointed by you.’ (elicited)

23358 A reflexive meaning ‘be disappointed in oneself’ can be expressed by combi-
 23359 ning the same person as subject of *pʰi* and possessor of *w-BO* (1SG in 112) with the
 23360 autive prefix *nui-* in its ‘self-affectedness’ function (§19.1.3).

- 23361 (112) *kuki si ki w-qə cʰw-tui-tcxt,*
 DEM.PROX tree DEM.PROX 3SG.POSS-root IPFV-2-take.out
 23362 *ju-tui-tsum w-tui-cʰa ny, [...] tce azo*
 IPFV-2-take.away QU-2-can:FACT ADD LNK 1SG
 23363 *a-BO pui-nui-pʰi-a ny*
 1SG.POSS-disappoint(1) IPFV-AUTO-disappoint(2)-1SG be:FACT
 23364 ‘If you succeed in uprooting this tree and carrying it away, I will admit
 23365 defeat.’ (140428 yonggan de xiaocafeng-zh, 82-84)

²³The noun and the verb are glossed with the same expression, but using the indices (1) and (2) (§22.4.3.2).

²⁴This collocation has an exact Tshobdun cognate *o-beʔ+ʷbi* ‘lose morale’ (Sun & Blogros 2019: 708).

23366 The anticausativized collocation *w-ko* + *mbi* can undergo additional derivations,
 23367 such as the facilitative (see 206 in §18.9.1), and the incorporating verbs *syrəombi* ‘be
 23368 discouraging’, ‘be hopeless’ and *nysəombi* ‘lose hope’ also derived from it (§20.13.1).

23369 18.5.5 Volitionality

23370 An important proportion of anticausative verbs are only compatible with inani-
 23371 mate subjects, for instance *ngruu* ‘break’ (example 105 in §18.5.2), *ndzi* ‘melt’ as
 23372 in (113) or *ndzyas* ‘be squeezed out’ (example 17, §5.1.2.3), and therefore express
 23373 non-volitional actions.

- 23374 (113) *txjpa kuu-xtciw~xtci ka-lvt ri,*
 snow SBJ:PCP-EMPH~be.small AOR:3→3'-release LNK
 23375 *máij-βdtyi, pŋjkʰu tu-ndzi jnu-cʰa.*
 NEG:SENS-be.serious still IPFV-ACAU:mel SENS-can
 23376 ‘There was a bit of snow, but it is not serious, it can still melt.’
 23377 (conversation 15-12-17)

23378 Even anticausative verbs that are compatible with human or animal subjects
 23379 are poorly compatible with volitional meaning. For instance, *ndzqβ* ‘fall/roll’ (from
 23380 *tṣaqβ* ‘cause to fall/roll’) expresses involuntary fall as in (114), but cannot be used
 23381 for voluntary rolling motion. The reflexive form of the base transitive verb *zyrtṣaqβ*
 23382 ‘cause oneself to fall/roll’ is required instead for this meaning (§18.3.2).

- 23383 (114) *puu-ndzaβ qʰe, paχci ra pa-nuu-lwoβ tce,*
 AOR:DOWN-ACAU:cause.to.fall LNK apple PL AOR:3→3'-AUTO-spill LNK
 23384 ‘He fell down and spilled the apples.’ (2010 Tshendzin pear story, 9)

23385 However, a few anticausative verbs are compatible with various degrees of
 23386 volitionality. The verb *mbyas* ‘turn over’ (vi) (from *pyas* ‘turn over’) can be used
 23387 for controllable actions such as tossing over one’s bed (115), and its distributed
 23388 action derivation (§19.4) *nymbyaslaž* ‘turn over here and there’ occurs to express
 23389 voluntary actions as in (116).

- 23390 (115) *kʰri ui-taž nwtcu ko-mbyas ny*
 bed 3SG.POSS-on DEM:LOC IFR:EAST-ACAU:turn.over ADD
 23391 *jny-mbyas tce*
 IFR:WEST-ACAU:turn.over LNK
 23392 ‘She tossed over her bed.’ (140430 yufu he tade qizi-zh, 237)

- 23393 (116) *nua χsuw-yjyn nua-nymbyalab nua-ηu.*
DEM three-times AOR-DISTR:turn.over SENS-be
23394 ‘(The horse Rtamchog Rinpoche) rolled over on its back three times (on
23395 the beach)’ (2012 Norbzang, 105)

23396 The anticausative *nungyt* ‘part ways’ (from *qyt* ‘separate’, with a lexicalized
23397 autive *nua-*, §18.5.1.2, §18.5.6) stands out in having no restriction on volitionality,
23398 as in (117) and (118) where it occurs in the meaning ‘divorce’.

- 23399 (117) *uu-χti ci na-nua-car ri, tcendyre*
3SG.POSS-companion INDEF AOR:3→3'-AUTO-search LNK LNK
23400 *kui-maq^hu q^he puu-nuNGyt-ndzi*
SBJ:PCP-be.after LNK AOR-ACAUS:separate-DU
23401 ‘She found a husband, but they eventually divorced.’ (14-siblings, 99-100)
- 23402 (118) *nyzo jr-ce, tcizo nuINGyt-tci ma*
2SG IMP-go 1DU ACAUS:separate:FACT-1DU apart.from
23403 *my-jyy*
NEG-be.allowed:FACT
23404 ‘Go away, we absolutely have to part ways.’ (2002qajdoskAt, 75)

23405 The anticausative *ndzor* ‘be attached’ (§18.5.3) is also attested as a synonym
23406 of the intransitive *nqor* in its special meaning ‘cling onto, lean on, grab’ (see
23407 example 204, §8.3.4.3) and with a clear volitional meaning, as shown by (119).²⁵

- 23408 (119) *uu-fsomur q^hendyre, tulxt nua uu-ta^h*
3SG.POSS-tomorrow.evening LNK second.sibling DEM 3SG.POSS-on
23409 *ko-ndzor q^he [...] tuarmuak^ha tce tulxt nua*
IFR-ACAUS:attach LNK dusk LNK second.sibling DEM
23410 *uu-ta^h ko-nqor tce,*
3SG.POSS-on IFR-hang LNK
23411 ‘The next day in the evening, he grabbed (clung onto) the second sister;
23412 (...) at dusk, he grabbed the second sister.’ (07-deluge, 41;45)

23413 18.5.6 Compatibility with other derivations

23414 Even though the anticausative probably originates from the autive prefix (§18.5.1.2),
23415 both derivations are compatible, as shown by examples such as *puu-nu-ηgra* (120)

²⁵In this excerpt, the same action is described twice, the first time with *ndzor* ‘be attached’, the second time with *nqor* ‘hang’.

23416 (from *kra* ‘cause to fall’) in a concessive clause (§19.1.4, §25.2.3) or with the spontaneous function (example 21 in §19.1.4).

- 23418 (120) *yuujsa* *uu-muuntov* *nua-kx-lxt* *nua*
 this.year 3SG.POSS-flower AOR-SBJ:PCP-release DEM
 23419 *pua-nnua-ŋgra* *kuny fsaq^he* *q^he* *nua*
 AOR:DOWN-AUTO-ACAUS:cause.to.fall also next.year LNK DEM
 23420 *uu-sta* *nua li* *nua jamar tc^hi* *kua-tu* *nua*
 3SG.POSS-place DEM again DEM about what SBJ:PCP-exist DEM
 23421 *uu-mat* *nua-βze* *cti*
 3SG.POSS-fruit IPFV-make[III] be.AFF:FACT
 23422 ‘Even if the flowers that have blossomed this year and fall down, the
 23423 next year it makes at that place as many fruits (as there were flowers the
 23424 previous year).’ (11-qarGW, 62)

23425 Like most intransitive verbs, anticausative verbs can undergo the subject-oriented-
 23426 facilitated (§18.9.1) *yr-* derivation. For instance, *nghut* ‘break’ (vi), *ngru* ‘break’
 23427 (vi) and *mbyas* ‘turn over’ (vi) have the derived forms *yrnglut* ‘breaking easily’
 23428 (121), *yrngru* ‘break easily’ and *yrmbyas* ‘turning over easily’ (of cars on a slip-
 23429 pery road).

- 23430 (121) *nua-rom* *kuny my-yy-nclut*
 AOR-be.dry also NEG-FACIL-ACAUS:break:FACT
 23431 ‘Even after it has dried up, (the wood of high mountain willow twig)
 23432 does not break easily.’ (07-Zmbri, 59)

23433 The subject-oriented facilitative of the anticausative and the object oriented
 23434 facilitative *nuyu-* (§18.9.2) of the base transitive verb has very close meanings: for
 23435 instance from *pryt* ‘break’ (vt) and *mbryt* ‘break’ (vi) have the facilitative forms
 23436 *nuyu-pryt* and *yy-mbryt*, both of which can be translated as ‘break easily’; the for-
 23437 mer implies however the presence of an external agent, while the latter expresses
 23438 a spontaneous action.

23439 The proprietive *sv-* derivation (§18.8) is also attested with some anticausative
 23440 verbs, in particular *svŋgio* ‘be slippery’ from *ŋgio* ‘slip’.

23441 The distributed action derivation (§19.4) occurs with anticausative verbs ex-
 23442 pressing a motion event, such as *n̥ndzɑβlaβ* ‘roll again and again/in all direc-
 23443 tions’ and *n̥mbyaslaβ* ‘turn over again and again’ from *ndzɑβ* ‘fall/roll’ *mbyas*
 23444 ‘turn over’ (vi), with a repeated motion; *n̥mbyaslaβ* can describe a (possibly vo-
 23445 litional) rolling motion in both lateral directions (remaining at the same place,

23446 as in 122 below and 116 in §18.5.5), as opposed to *n̥yndžaβlaβ*, used for a rolling
 23447 motion either in one direction (123), or rolling motion in disorderly fashion.

- 23448 (122) *zruay nu-nymbyalab rdul my-tcxt*
 louse AOR-DISTR:ACAUS:turn.over dust NEG-take.out:FACT
 23449 ‘When a louse rolls around, it does not raise dust.’ (proverb)

- 23450 (123) *nunuu rgoŋlu nuu nuicimuma zo tu-n̥yndžaβlaβ jo-za*
 DEM ball DEM immediately EMPH INF:II-DISTR:ACAUS:roll IFR-start
 23451 *tce jo-ndžaβ ny jo-ndžaβ.*
 LNK IFR-ACAUS:roll add IFR-ACAUS:roll
 23452 ‘The ball immediately started rolling over and over.’ (140514 huishuohua
 23453 de niao-zh, 136)

23454 The anticausative verb *ŋgio* ‘slip’ has two distributed action forms, the regular
 23455 one *n̥yŋgiolo* which can be translated as ‘slip/glide/move around over and over’
 23456 (124) and *nunŋiolulo*, which rather has a volitional meaning ‘glide, slide (in no
 23457 particular direction)’ (125).

- 23458 (124) *tce nunuu pjú-wy-ta tce, tce snama tŋ-ŋke tce*
 LNK DEM IPFV:DOWN-INV-put LNK LNK beast.of.burden AOR-walk LNK
 23459 *tce, my-n̥yŋgiolo.*
 LNK NEG-DISTR:ACAUS:cause.to.glide:FACT
 23460 ‘One puts (belly and neck bands on the burdens), so that when the beast
 23461 of burden walks, (the burden) does not move around (on its back).’
 23462 (30-tAsno, 98)

- 23463 (125) *tŋ-pytso tŋjpyom u-taŋ nu-nunŋiolulo*
 INDEF.POSS-child ice 3SG.POSS-on SENS-DISTR:ACAUS:cause.to.glide
 23464 ‘The child slides on the ice.’ (elicited)

23465 A few anticausative verbs can take the sigmatic causative prefix. For instance,
 23466 the causative *suyndži* ‘melt’ (vt) of *ndži* ‘melt’ (vi) can be elicited. This form can
 23467 express indirect causation, as in (126),²⁶ as opposed to the base transitive verb
 23468 *ftsi* ‘melt’ which is used for volitional activities (127).

- 23469 (126) *ta-mar cʰy-suy-ndži-t-a*
 INDEF.POSS-butter IFR-CAUS-ACAUS:melt-PST:TR-1SG
 23470 ‘I let the butter melt (by forgetting it next to a source of heat).’ (elicited)

²⁶The same semantic contrast appears to be found in Zbu (Gong Xun, p.c.) and Tshobdun (Sun 2014a).

- 23471 (127) *k^hru nuu c^hur-ft̪si-nuu tce, tce numuu pjua-lxt-nuu*
 pig.iron DEM IPFV-melt-PL LNK LNK DEM IPFV:DOWN-release-PL
 23472 *nuu-cti tce,*
 SENS-be.AFF LNK
 23473 ‘They melt the pig iron and pour it into (the mold).’ (25-qraR, 33)

23474 The anticausative *nunqyt* ‘part ways’ has the causative form *znuNqyt* ‘sep-
 23475 arate’. This verb is not specifically used for indirection causation, but it is re-
 23476 stricted to express separation of two entities from each other, as in (128), unlike
 23477 the base verb *qyt* ‘separate’ which has a broader range of meanings, including
 23478 ‘spread’ (of limbs, hair, feathers) as in (129).

- 23479 (128) *rasti c^ho ryjndor ni, pjúr-wy-^hndzyr-ndzi tce*
 turnip COMIT turnip.root DU IPFV-INV-cut-DU LNK
 23480 *píu-wy-z-nunqyt-ndzi* *ju.*
 IPFV-INV-CAUS:separate-DU be:FACT
 23481 ‘One separates the turnip from its root by cutting them.’ (150903 kAJar,
 23482 7-8)
- 23483 (129) *w-jme nuu [...] ki tu-fse tu-z-nundzi*
 3SG.POSS-tail DEM DEM.PROX IPFV-be.like IPFV-CAUS-be.vertical[III]
 23484 *tce tce nuu-qyt juu-ju.*
 LNK LNK IPFV-separate SENS-be
 23485 ‘It puts its tail vertically like this and spreads (the tail feathers).’
 23486 (24-ZmbrWpGa, 73-79)

23487 18.5.7 Other cases of voicing alternation

23488 The anticausative derivation is not the only type of voicing alternation in Japhug.
 23489 Among verbs, two cases of non-anticausative voicing alternations are found,
 23490 the isolated pair treated in §19.7.9 and the irregular sigmatic causative *zNGor*
 23491 ‘hang’ (vt) from *nqoB* ‘hang’ (vi). The onset *zNG-* in *zNGor* ‘hang’ (containing the ir-
 23492 regular *z-* allomorph of the sigmatic causative prefix, §17.2.2.4) apparently results
 23493 from the voicing of an earlier cluster like **c-nq-* due to phonotactic constraints
 23494 (§4.2.1.5).

23495 In ideophones, voicing alternations with or without prenasalization are also
 23496 attested, as shown by the pair *quqli* and *nguqli*, both meaning ‘eyes wide open’
 23497 (§10.1.5.3). In addition, at least one ideophone, *dzoB* ‘kneeling suddenly and re-
 23498 spectfully’, which appears in collocation with the transitive verb *ts^hoB*, originates
 23499 from the anticausative verb *ndzor* ‘be attached’ (§10.1.6).

23500 18.6 Antipassive

23501 The antipassive derivation converts a morphologically transitive verb into an
23502 intransitive one, removing the object and preserving the subject. As in the closely
23503 related Tshobdun language ([Sun 2006b](#): 8), two antipassive prefixes are found in
23504 Japhug: *rx-* and *sy-*.

23505 18.6.1 *rγ-* antipassive

The *ry-* antipassive prefix is productive, and it is thus impossible to provide a complete list of all examples. Table 18.7 provides a representative sample of this derivation, which includes a number of verbs of Tibetan origin (for instance *fsoy* ‘earn’ and *βzjoz* ‘learn’ from བ୍ୟୁସ བ୍ୟୁସ *bsogs* ‘accumulate’ and གୁଁ གୁଁ *sb'ays* ‘learn’, respectively). As in Tshobdun (Sun 2006b: 8), this prefix is typically used when the suppressed argument is non-human (§18.6.7.2), though a few exceptions exist (§18.6.4).

This derivation takes as input mono- or ditransitive verbs (§18.6.4), and one labile verb (*suso* ‘think’, see §14.5.1.3).

The main morphosyntactic differences between transitive verbs and their corresponding antipassive forms are illustrated by the following examples. In (130), the base verb *βzjoz* ‘learn’ is fully transitive, selecting the type-C preverbs in the non-local direct Aorist (§14.3.1, §15.1.1.1). The object is the topic studied (in 130, the nominalized verb *tu-sjaz* ‘sorcery’) and the transitive subject, the person learning, is taking the ergative case.

- 23521 (130) *azuy a-me ci tu tce, numu ku*
 1SG.GEN 1SG.POSS-daughter INDEF exist:FACT LNK DEM ERG
 23522 *tui-sŋas pa-βzjoz tce,*
 NMLZ:ACTION-cast.spells AOR:3→3'-learn LNK
 23523 'I have a daughter, and she has learned sorcery.' (140512 fushang he
 23524 yaomo-zh, 143)

The antipassive verb *rÿbzjoz* ‘learn things’ in (131) is morphologically intransitive, selecting the type-A preverbs (§14.3.1) in the Aorist (*pu-* instead of *pa-*, §15.1.1.1). It is used to avoid mentioning a specific topic of study, and it is often better to translate this verb as ‘go to school/university’. Like the transitive subject of *þzjoz* ‘learn’, the subject of *rÿbzjoz* ‘learn things’ corresponds to the person(s) acquiring knowledge. However, when overt, its subject occurs in absolute form as *u-me nu* ‘her daughter’ in (131).

Table 18.7: Examples of the antipassive prefix *rr-*

Base verb	Derived verb
<i>rok</i> ‘carve’	<i>rrrok</i> ‘carve things’
<i>cpʰyt</i> ‘patch’	<i>rrcpʰyt</i> ‘patch clothes’
<i>ctsat</i> ‘spare’	<i>rrctsat</i> ‘spare things, managing without wasting’
<i>fse</i> ‘whet’	<i>rrxfse</i> ‘whet things’
<i>ftczz</i> ‘castrate’	<i>rrftczz</i> ‘castrate animals’
<i>ntçʰa</i> ‘butcher’	<i>rrntçʰa</i> ‘butcher animals’
<i>mno</i> ‘prepare’	<i>rrymno</i> ‘prepare things’
<i>ndun</i> ‘read aloud’	<i>rrndun</i> ‘read sutras/formulas’
<i>rkyz</i> ‘carve’	<i>rrrkyz</i> ‘carve things’
<i>rvt</i> ‘write, draw’	<i>rrrvvt</i> ‘write/draw things’
<i>βzjoz</i> ‘learn’	<i>rrβzjoz</i> ‘study, learn about things, go to school’
<i>skyr</i> ‘weigh’	<i>rrskyr</i> ‘weigh things’
<i>tṣuβ</i> ‘sew’	<i>rrtṣuβ</i> ‘sew clothes’
<i>scvt</i> ‘move’	<i>rrscvt</i> ‘move one’s house’
<i>fsor</i> ‘earn’	<i>rrfsor</i> ‘earn money’
<i>çar</i> ‘search’	<i>rrçar</i> ‘search for things’
<i>χtu</i> ‘buy’	<i>rraxtu</i> ‘do shopping, buy things’
<i>χtci</i> ‘wash’	<i>rraxtci</i> ‘wash, have a bath’
<i>fcvt</i> ‘tell’	<i>rrxfcvt</i> ‘report’
<i>ŋa</i> ‘owe’ (money)	<i>rrnŋa</i> ‘have a debt’
<i>tçvβ</i> ‘burn’	<i>rrtçvβ</i> ‘burn land’
<i>pyas</i> ‘turn over’	<i>rrypyas</i> ‘reclaim land’
<i>ntsye</i> ‘sell’	<i>rrntsye</i> ‘do business’
<i>raðruuz</i> ‘sweep’	<i>rrraðruuz</i> ‘sweep the ground and tidy things up’
<i>suso</i> ‘think’	<i>rrususo</i> ‘think’, ‘ponder’
<i>tʰu</i> ‘ask’	<i>rrtʰu</i> ‘ask questions’
<i>ctsu</i> ‘entrust with’	<i>rrctsu</i> ‘entrust someone with to’
<i>mbi</i> ‘give’	<i>rrmbi</i> ‘give to someone’

- 23532 (131) *wu-me* *nua puu-ry-βzjoz* *ri t^ham w-<gongzuo>*
 3SG.POSS-daughter DEM AOR-APASS-learn LNK now 3SG.POSS-job
 23533 *wu-ma* *me*
 3SG.POSS-work not.exist:FACT
 23534 ‘Her daughter went to school (studied things) but has no job now.’
 23535 (17-lhazgron, 60)

23536 Although example (131) only illustrates one of the seven morphological cri-
 23537 teria for transitivity (§14.3.1), all have been successfully tested with antipassive
 23538 prefixes.

23539 The non-orientable antipassive verbs select as lexicalized orientation the same
 23540 one as that of their base verb. For instance, *rymbi* ‘give to someone’ selects the
 23541 EASTWARDS preverbs like its base verb *mbi* ‘give’ (§15.1.5.10).

23542 The object affected by the *ry-* derivation is not only demoted morphologically
 23543 but also removed syntactically, and verbs with the antipassive prefix cannot take
 23544 an overt patient corresponding to the object of the base verb, even as semi-object
 23545 or with an oblique case (the antipassive *ryfçrt* ‘report’ is however an exception,
 23546 see §18.6.3).

23547 The antipassive verbs are generally understood as having a generic/indefinite
 23548 patient. In Table 18.7, their meaning is translated using the most usual patient
 23549 associated with a particular activity, for instance ‘clothes’ in the case of *ry-tṣuβ*
 23550 ‘sew’ and *ry-çp^hxt* ‘patch’. The patient that has been demoted from object status
 23551 by the *ry-* prefix is nearly always an inanimate entity, but there are some exam-
 23552 ples of verbs (such as *ryntçha* ‘butcher’) with animal patient, and even demoted
 23553 human recipient in the case of some secundative verbs (§18.6.4). The semantic
 23554 contrast between the *ry-* and *sy-* antipassive derivations is described in (§18.6.7),
 23555 and morphosyntactic constructions competing with antipassive derivations to
 23556 express indefinite objects are discussed in §18.6.8.

23557 Although the meaning of the derived verbs is not fully predictable in each case
 23558 (§18.6.3), the formation of the *ry-* antipassive is almost perfectly regular. There
 23559 are only three *ry-* antipassive verbs with irregular morphology. First, *ryŋja* ‘have
 23560 a debt’ from *ŋja* ‘owe’ (a verb selecting as object the amount of money owed, 132)
 23561 has an additional *-n* element.

- 23562 (132) *squi-mpcar* *kx-ŋja-t-a*
 TEN-money.unit AOR-owe-PST:TR-1SG
 23563 ‘I bought (it) on credit and owe (him) ten renminbi.’ (elicited)

23564 Second, *rytsye* ‘do business’ from *ntsye* ‘sell’ lacks the *n-* preinitial found in

the base verb. Third, *rususo* ‘think’ from *suso* ‘think’ (about) (§14.5.1.3) has *ru-* instead of *ry-*. These cases are accounted for in §20.10.1.

Apart from these irregularities, the allomorphy of the *rv-* antipassive is limited to the variant *ra-* found with verb roots with an onset with uvular preinitial (§3.5.4) as in *raxtu* ‘do shopping’. The antipassive *rv-* prefix is formally similar to the denominative *rv-* (§20.4.1),²⁷ to the extent that synchronic ambiguity exists between these two prefixes. In particular, the verb *rvznde* ‘make a wall’ (vi) can be synchronically analysed either as a denominal form of *znde* ‘stone wall’ or of the transitive verb *znde* ‘make a wall’. Note that both options are equally likely, as the prefix *rv-* is attested with other denominal expressing the building of the base noun, for instance *tr-loó* ‘nest’ → *rvloó* ‘make a nest’ (vi). The historical implications of this observation are explored in §20.10.1.

Not all transitive verbs with non-human patients can be antipassivized. In particular, when an intransitive verb having the meaning of the expected antipassive verb already exists, antipassivization is less likely. For instance, *ti* ‘say’ lacks a *ry-* antipassive form, as the intransitive *ruçmi* ‘speak’ (which can have an overt dative recipient, 19, §14.2.4, but no reported speech complement clause) already serves as its ‘lexical antipassive’. The verbs of ingestion *ndza* ‘eat’ and *tsʰi* ‘drink’ share the compound verb *rundzṛtsʰi* ‘have a meal’ (§20.4.1, §20.12) as their intransitive counterpart.

18.6.2 *sy-* antipassive

Like the *rv-* antipassive, the *sv-* antipassive is productive. Table 18.8 presents a list of representative examples, including Tibetan loanwords such as *fstxt* ‘praise’ from བས୍ତୋ བ୍ସ୍ତୋ ‘praise’. Unlike the *rv-* antipassive, the *sv-* prefix is used when the demoted patient is human or equivalent (§18.6.7.2, see Sun 2006b: 8 on Tshob-dun), except in the case of some secundative verbs (§18.6.4). The *sv-* antipassive derivation can also demote animal patients in specific contexts (§18.6.7.2).

The only cases of allomorphy with the antipassive *sv-* are the allomorph *sa-* occurring when the prefix is followed by a complex onset whose first element is a uvular fricative (§3.5.4), and the allomorph *svz-* which appears with some polysyllabic stems whose first syllable has a sonorant initial *svzyymu* ‘praise people’.

The *sv-* prefix is homophonous with the rogative (§18.2), the proprietive (§18.8) and denominal derivations (§20.3), as well as with the oblique participle *sv(z)-* (§16.1.3). Potential ambiguity exists with the proprietive derivation. For instance,

²⁷In addition, there is a residue of *rr-* prefixed verb that can neither be analyzed as antipassive nor as denominal derivations (§19.7.5).

23599 the transitive *nuzduy* ‘worry about’ has two homophonous intransitive derived
 23600 verbs *sr-nuzduy*, an antipassive meaning ‘worry about people’, and a proprietive
 23601 ‘causing worry to people’.

Table 18.8: Examples of the antipassive prefix *sr-*

Base verb	Derived verb
<i>tçʰuu</i> ‘gore’	<i>srtçʰuu</i> ‘gore people’
<i>mtsuy</i> ‘bite’	<i>srmtsuy</i> ‘bite people’
<i>nrmtsiob</i> ‘peck’	<i>srnrmtsiob</i> ‘peck people’
<i>yrmui</i> ‘praise’	<i>sryrmui</i> , <i>srzyymui</i> ‘praise people’
<i>fstrt</i> ‘praise’	<i>srfstrt</i> ‘praise people’
<i>nuurtça</i> ‘tease’	<i>srnurrtça</i> ‘tease people’
<i>nduu</i> ‘hit’	<i>sasnduu</i> ‘hit people’
<i>nykʰe</i> ‘bully’	<i>srynykʰe</i> ‘bully people’
<i>nrsry</i> ‘be jealous of’	<i>srnrsry</i> ‘be jealous of people’
<i>nurutṣa</i> ‘envy’	<i>srnurutṣa</i> ‘envy people’
<i>car</i> ‘search’	<i>srcar</i> ‘search someone’
<i>suxçrt</i> ‘teach’	<i>srsuxçrt</i> ‘teach people’
<i>tʰu</i> ‘ask’	<i>srtʰu</i> ‘ask in marriage’
<i>nrre</i> ‘laugh’	<i>srnrrre</i> ‘laugh at people’
<i>sryo</i> ‘listen’	<i>srsryo</i> ‘listen to advice’

23602 Most *sr-* antipassives derive from monotransitive verbs, but a handful of them
 23603 are based on ditransitive verbs (§18.6.4). In addition, the labile verbs *nrre* ‘laugh’
 23604 and *sryo* ‘listen’ are also compatible with the *sr-* prefix. The antipassive forms
 23605 *srsryo* ‘be obedient’ and *srnrrre* ‘laugh at people’ derive from the meanings ‘listen
 23606 to’ and ‘laugh at, mock’ that these two verbs have when conjugates transitively
 23607 (§14.5.1.3).

23608 Some of *sr-* antipassive verbs can either be dynamic verbs or stative verbs, in
 23609 the latter case expressing a general tendency/propensity of the subject to do the
 23610 action. For instance, *sr-ndza* from *ndza* ‘eat’ can mean ‘eat people, eat someone’
 23611 (as in 156, §18.6.7.1), but also ‘be a man-eater’, ‘prick’ (133) or ‘be carnivorous’
 23612 (animal eating other animals, 158a, §18.6.7.2).

- 23613 (133) *tce nwnuš u-rme tu ma my-sr-ndza ma*
 LNK DEM 3SG.POSS-hair exist:FACT LNK NEG-APASS-eat:FACT LNK

- 23614 *uu-mdzu* *me.*
 3SG.POSS-thorn not.exist:FACT
 23615 ‘It has hair, but does not prick, because it has no thorns.’ (15-babW, 97)

23616 The propensity antipassives have a meaning very close to that of generic hu-
 23617 man objects, as demonstrated by example (134), where the same meaning is ex-
 23618 pressed by the antipassive *sx-ndza* and the generic object *kui-ndza* (see additional
 23619 examples in §18.6.8.2).

- 23620 (134) *mdzadi nuu wuma zo sx-ndza. wuma zo*
 flea DEM really EMPH APASS-eat:FACT really EMPH
 23621 *kui-ndza tce ryza.*
 GENR:S/O-eat:FACT LNK itch:FACT
 23622 ‘Fleas bite a lot. They bite people a lot, and it itches.’ (21-mdzadi, 16-17)

23623 18.6.3 Lexicalized antipassive

23624 Most antipassive verbs have meanings that are predictable from that of their base
 23625 verbs. However, in some cases antipassivization not only demotes the patient
 23626 from object status, but restricts the range of meanings of the verb root.

23627 The meaning of the transitive verb *pyaš* ‘turn over’ differs depending on the
 23628 objects it occurs with; its possible meanings include ‘turning (clothes) inside out’,
 23629 ‘open (the cover of a box)’, ‘cross (mountains, rivers)’ (20, §15.1.2.1) or ‘plough
 23630 (fields)’ (see 135 below and 138 in §9.1.6.4).

- 23631 (135) *nuu-ji ra kui-duu~dyn kui-juu~jom*
 3PL.POSS-field PL SBJ:PCP-EMPH~be.many SBJ:PCP-EMPH~be.wide
 23632 *lo-pyaš-nuu*
 IFR:UPSTREAM-turn.over-PL
 23633 ‘They had ploughed many wide fields for them.’ (2002 qajdoskAt, 90)

23634 By contrast, its antipassive *rypyāš* ‘reclaim land’²⁸ only preserves the last mean-
 23635 ing of the base verb, with ‘land’ or ‘field’ as implicit patient as in (136). Note in
 23636 addition that the antipassive selects the UPSTREAM preverbs (*lu-* in 136) like the
 23637 verb *pyaš* in the meaning ‘plough’ (*lo-* in 135).

²⁸The meaning of this verb corresponds to Chinese 开垦 <kāikěn> ‘reclaim land’, ‘clear a wild area for cultivation’.

- 23638 (136) *zgoku tu-ce q^he lu-ry-pyar nv,*
 mountain IPFV:UP-go LNK IPFV:UPSTREAM-APASS-turn.over ADD
 23639 *tr-ryku c^ho ra pjur-ji q^he tce nuu kui-fse*
 INDEF.POSS-crops COMIT PL IPFV-plant LNK LNK DEM SBJ:PCP-be.like
 23640 *ku-ryzi pjy-ju.*
 IPFV-stay IFR.IPFV-be
 23641 ‘(The old man) lived by going to the mountain, clearing fields and
 23642 planting crops.’ (150831 jubaopen-zh, 3-5)

23643 Similarly, while the transitive verb *tçyβ* ‘burn’ can take various types of refer-
 23644 ents as objects (including humans, as in 88, §14.3.3.3), the antipassive *rvtçyβ* ‘burn
 23645 land’²⁹ is also restricted to its use in agriculture, with ‘land’ as demoted patient.
 23646 The expected meaning of *rypyaz* ‘reclaim land’ and *rvtçyβ* ‘burn land’ if they
 23647 had been regular antipassives would have been ‘turn things over’ and ‘burn
 23648 things’, respectively. Despite the absence of an incorporated noun, these two
 23649 verbs include information about the demoted patient. This semantic irregularity
 23650 has implications for the study of the origin of the antipassive prefixes in Japhug,
 23651 as discussed in §20.10.1.2 .

23652 The verb *rvfcyt* ‘report’ from *fçyt* ‘tell’ stands out among antipassive verbs
 23653 from the point of view syntax. While *rvfcyt* is morphologically intransitive, as is
 23654 shown by the form *kuu-rvfcyt* in (137) with the intransitive subject generic prefix
 23655 *kuu-* (§14.2.1.2), the patient of this verb can nevertheless be overt as a semi-object
 23656 (in 137, the demonstrative *nunura*, anaphorically referring to the previous com-
 23657 plement clauses). The object of the base verb *fçyt* ‘tell’ is thus only demoted to
 23658 semi-object status (§8.1.5), and not syntactically removed. The dative recipient is
 23659 also preserved by the antipassive derivation.

- 23660 (137) *slama ra yuu t^huit^hyci kui-fse, nuu ky-ry-βzjoz ra*
 student PL GEN something SBJ:PCP-be.like DEM INF-APASS-study PL
 23661 *nuu-stu mūj-stu nuu, [...] nunura nuu-p^hama*
 SENS-be.serious NEG:SENS-be.serious DEM DEM:PL 3PL.POSS-parents
 23662 *ra nuu-cki kui-ryfcyt nuu-ra.*
 PL 3PL.POSS-DAT GENR:S/O-report:FACT SENS-be.needed
 23663 ‘(As a teacher), one has to report to the parents all sorts of things about
 23664 the student, whether they study seriously or not etc.’ (150901
 23665 tshuBdWnskAt, 20)

²⁹The meaning of this verb is translated as 烧荒 <shāohuāng> ‘clear land by fire’ in Chinese.

18.6.4 Antipassive forms of ditransitive verbs

Among ditransitive verbs, indirective verbs (§14.4.1) build their antipassive derivations the same way as monotransitive verbs.³⁰ For instance, *t^hu* ‘ask’ has the two antipassive forms *rvt^hu* ‘ask questions’ and *srt^hu* ‘ask in marriage’ depending on whether the demoted patient is inanimate or human (see examples 155b and 159, §18.6.7).

Three secundative verbs, *mbi* ‘give’, *ctsuu* ‘entrust with’ and *jts^hi* ‘give to drink’, behave differently in this regard. Their object (semantically the recipient) is generally human, but the *sv-* antipassive prefix does not occur with these verbs: the corresponding forms (for instance *svmbi* ‘ask for’) exist, but do not have antipassive meaning (they exemplify the rogative derivation, §18.2). Instead, their antipassive forms *rvmbi* ‘give to someone’, *rvctsuu* ‘entrust someone with’ and *rvjts^hi* ‘give to someone to drink’ take the *rv-* prefix. These verbs are henceforth referred to as ‘*rv-* antipassivized secundative verbs’.

The demoted recipient of *rv-* antipassivized secundative verbs can be indefinite and non-specific as in the case of most antipassive verbs (§18.6.7), as in (138).

- (138) *wzry w-βra kui-rkui~rkun ntsuu ma*
 3SG:GEN 3SG.POSS-share SBJ:PCP-EMPH~be.few always apart.from
 mu-pjy-nu-ta. w-ro ra lonba nu-ry-mbi pjy-ηu.
 NEG-IFR-AUTO-put 3SG.POSS-rest PL all IPFV-APASS-give IFR.IPFV-be
 ‘He would only keep a little for himself, and give away the rest.’ (150902
 hailibu-zh, 8)

However, often, as in (139) and (140), the identify of the recipient is known to the speaker, but the antipassive is chosen to leave it unspecified, either because the information is irrelevant (because the addressee does not know the people in question) or to hide information.

- (139) *kumŋu ma mu-nu-βaŋ w-q^hu tce, tce χsum nu*
 five apart.from NEG-AOR-hatch 3SG.POSS-after LNK LNK three DEM
 nu-ry-mbi-tci tce
 AOR-APASS-give-DU LNK
 ‘Only five (of the twelve eggs) hatches, and we gave three (of the chicks)
 (to other people).’ (22-kumpGa, 81-82)

³⁰Note however the morphosyntactic peculiarities of the lexicalized antipassive *rvfçrt* ‘report’ from the indirective verb *fçrt* ‘tell’ (§18.6.3).

- 23694 (140) *a-kumpya u-puu ku-syndur~jndut zo pu-ŋu*
 1SG.POSS-hen 3SG.POSS-young SBJ:PCP-EMPH~be.cute EMPH PST.IPFV-be
 23695 *ri, tce ri <xinqitian> <fangjia> tce tu-nu-ce-a*
 LNK LNK Sunday holidays LOC IPFV:UP-VERT-go-1SG
 23696 *pua-ra tce c-ky-ry-ctsui-a.*
 PST.IPFV-be.needed LNK TRAL-AOR-APASS-entrust.with-1SG
 23697 ‘My chicks were very cute, but on sunday, I had to go back on holiday,
 23698 and I went (to someone_i) and entrusted him/her/them_i with them.
 23699 (150819 kumpGa, 48-49)

23700 In addition, antipassivization of secundative verbs does not removes the recipient:
 23701 it can be demoted to oblique argument status, with dative marking, as in
 23702 (141) and (143).

- 23703 (141) *azo ty-tcuu ra nui-cki cʰa juu-ry-jtsʰi-a*
 1SG INDEF.POSS-son PL 3PL.POSS-DAT alcohol IPFV-APASS-give.to.drink
 23704 *ŋgryl*
 be.usually.the.case:FACT
 23705 ‘I (usually) give a drink to the guys.’ (elicited)

23706 Although the three *ry-* antipassivized secundative verbs *rymbi* ‘give to someone’,
 23707 *ryctsui* ‘entrust someone with’ and *ryjtsʰi* ‘give to someone to drink’ are
 23708 morphologically intransitive like all other antipassives, as shown by the absence
 23709 of past transitive *-t-* suffix in (140), and of C-type orientation preverb in (143),
 23710 they do preserve more transitivity features than most antipassive verbs.

23711 First, the three *ry-* antipassivized secundative verbs differ from other antipassive
 23712 verbs in terms of case marking: their subject can receive ergative marking
 23713 in some contexts.

23714 With third person arguments and no overt recipient as in (142), the subject
 23715 *a-mu a-wa ni* is in absolute form.

- 23716 (142) *a-mu a-wa ni a-kʰuna py-ry-mbi-ndzi*
 1SG.POSS-mother 1SG.POSS-father DU 1SG.POSS-dog IFR-APASS-give-DU
 23717 ‘My parents gave my dog away.’ (elicitation, 2019-11-30)

23718 However, ergative marking on the subject occurs in (143) with a 1SG recipient,
 23719 and in (144) below with a 1SG semi-object (theme).

- 23720 (143) *a-wa kuu a-bi a-cki*
 1SG.POSS-father ERG 1SG.POSS-younger.brother 1SG.POSS-DAT
 23721 *ky-ry-ctsui.*
 AOR-APASS-entrust.with
 23722 ‘My father entrusted me with my younger brother.’ (elicited)

23723 Second, an even more unusual feature of the the three *ry-* antipassivized se-
 23724 cundative verbs is that the morphosyntactic status of the theme of the giving
 23725 action. In all the examples above from (138) to (141), the theme is a third person
 23726 semi-object (§8.1.5), and its number cannot be indexed even with a 1sg subject
 23727 (§14.3.2.6).

23728 However, in the very rare cases when the theme is first or second person, the
 23729 verb *rmbi* ‘give to someone’ exceptionally occurs with inverse *wy-* or local sce-
 23730 nario indexation affixes (*ta-* 1→2 and *ku-* 2→1, see §14.3.2.3) prefixes, as if the verb
 23731 were morphologically transitive, and the theme were a direct object. No such ex-
 23732 ample is found in the corpus, but forms such as (144) can be elicited (§14.4.2.2).

- 23733 (144) *a-wa kuu azo nú-wy-ry-mbi-a*
 1SG.POSS-father ERG 1SG AOR-INV-APASS-give-1SG
 23734 ‘My father gave me away.’ (elicited)

23735 This puzzling construction is not only possible, but it is actually the only way
 23736 to express a non-third person theme with the verb *mbi* ‘give’.

23737 Not all secundative verbs however select the *ry-* antipassive like *mbi* ‘give’ and
 23738 *jtsʰi* ‘give to drink’. For instance, *suxçrt* ‘teach’, which encodes the recipient/ad-
 23739 dressee as object (the 2sg in 145, as indicated by the *ta-* portmanteau prefix), is
 23740 not compatible with *ry-* prefix: the only antipassive form of this verb is *srsuxçrt*
 23741 ‘teach people’, ‘work as a teacher’, as in (146).

- 23742 (145) *txfsyri ky-βzu ci pjui-ta-suxçrt.*
 thread INF-make a.little IPFV-1→2-teach
 23743 ‘Let me teach you how to make threads.’ (vid-20140506043657, 43)

- 23744 (146) *li sloxpun ta-ndo-t-a tce, nure*
 again teacher AOR:3→3'-take-PST:TR-1SG LNK DEM:LOC
 23745 *pjui-sy-suxcat-a pui-ŋu.*
 IPFV-APASS-teach-1SG PST.IPFV-be
 23746 ‘I too became a teacher, and I was teaching there.’ (12-BzaNsa, 19)

23747 Similarly, the secundative verb *nusukʰo* ‘rob, extort’ has the antipassive form
 23748 *srynusukʰo* ‘rob people’, also with the *sy-* prefix (example 168, §18.6.9).

23749 **18.6.5 Reduplicated antipassive**

23750 The intransitive verb *rxt^hut^he* ‘inquire’, ‘ask for information’ derives from *t^hu* ‘ask’
 23751 like *rxt^hu* ‘ask questions’ (155b, §18.6.7, §18.6.4), with the rare reduplication in *-e*
 23752 in addition to the *rr-* prefix. This reduplicated antipassive form is isolated, but
 23753 this type of reduplication is attested in a few other forms (§19.4.2.1).

23754 As shown by (147), *rxt^hut^he* ‘inquire’ is an intransitive verb: the type A orientation
 23755 preverb *nua-* is selected instead of type C if the verb were morphologically
 23756 transitive (§15.1.1.1). This verb also selects an oblique argument in the dative, like
 23757 its base verb (§14.4.1).

- 23758 (147) *a-cki yuu-nua-rxt^hut^he*
 23759 1SG.POSS-DAT CISL-AOR-ask.permission
 ‘He came and asked me (for information).’ (elicited)

23760 This verb is mainly attested as a negative infinitive converb *mx-kr-rxt^hut^he*
 23761 ‘without asking (for permission)’ (as in Chinese 问都没有问就 ……) as in (148).³¹

- 23762 (148) *mbro nua kuu ckyruu nuunu [maka mx-kr-rxt^hut^he] kuu*
 23763 horse DEM ERG serow DEM at.all NEG-INF-ask.permission ERG
nufse ju-ky-yi nua wuma zo pjy-q^ha jnu-ηu.
 23764 like.that IPFV-INF-come DEM really EMPH IFR.IPFV-hate SENS-be
 23765 ‘The horse hated that the serow came like that without asking
 (permission) at all.’ (ma he lu-zh, 9)

23766 **18.6.6 Antipassive and past imperfective**

23767 Antipassive verbs, unlike most dynamic verbs (§21.5.3.1), are compatible with
 23768 Past Imperfective *pu-* and Inferential Imperfective *pjy-*. This question is however
 23769 difficult to study for three reasons.

23770 First, many of the transitive base verbs in Tables 18.7 and 18.8, for instance
 23771 *βzjoz* ‘learn’ and *cp^hyt* ‘patch’, select the DOWNWARDS preverbs as one of their
 23772 lexicalized orientation (see for instance the perfective form *pa-βzjoz* ‘she learned
 23773 it’ in 130 above). As a consequence, there is syncretism for these verbs between
 23774 Aorist and Inferential on the one hand, and Past Imperfective and Inferential
 23775 Imperfective on the other hand (§21.5.3.1). For instance, the form *puu-rr-βzjoz* ‘she
 23776 went to school’ in (131) above is Aorist, but in a different context the same form
 23777 can be analyzed as a Past Imperfective ‘she was studying’.

³¹The ergative on the subject *mbro nua kuu* ‘the horse’ is due to the main verb *pjy-q^ha* ‘he hated
 that....’

Second, while simple Past and Inferential Imperfective are attested with antipassive verbs, they are also compatible with the Periphrastic Aorist and Inferential Imperfective (§21.5.3), combining the Imperfective verb form (§21.2.2) with a copula in Inferential Imperfective (*pjy-ŋu*) or in Past Imperfective (*pu-ŋu*) as illustrated by example (149). It is unclear whether any function difference exists between non-periphrastic and periphrastic tenses for these verbs, apart from the fact that the latter are unambiguously imperfective.

- (149) *tce wu-me nunuu <xianzhong> nutcu pjuu-ry-βzjoz*
 LNK 3SG.POSS-daughter DEM district.school DEM:LOC IPFV-APASS-learn
puu-ŋu ri,
 IPFV-be LNK
 '(At the time when) her daughter was going to school, (her father was
 drinking alcohol and neglected his parental duties).' (17-lhazgron, 67)

Third, since some of the *s-* antipassives can be used as stative verbs (propensity antipassives, §18.6.2), they are thus compatible with Aorist and Inferential Imperfective anyway.

Despite these difficulties, unambiguous examples of non-periphrastic Aorist and Inferential Imperfective are not common in the corpus even with verbs selecting the DOWNWARDS orientation. In (150), it is clear from the context that *pjy-ry-βzjoz* is Inferential Imperfective rather than Inferential Perfective both due to the context, the presence of the adverb *ntsui* and the unambiguous Inferential Imperfective with Progressive *pjy-k-ŋsui-ndun-ci* 'he was reading it' in the following clause.

- (150) *<caichen> nunuu pjy-ry-βzjoz ntsui. juyi ntsui*
 ANTHR DEM IFR.IPfv-APASS-learn always book always
pjy-k-ŋsui-ndun-ci.
 IFR.IPfv-PEG-PROG-read-PEG
 'Caichen was always studying, always reading books.' (150907
 niexiaoqian-zh, 21)

In other contexts, there is genuine ambiguity: example (151) can either mean 'the wife was patching clothes' (the interpretation provided by Tshendzin) or 'the wife (had) patched clothes'.

- (151) *tx-rzaβ nuu pjy-ry-cpʰyt,*
 INDEF.POSS-wife DEM IFR.IPfv-APASS-patch
 'The wife was patching clothes.' (qajdoskAt 2002, 20)

23808 18.6.7 The uses of the antipassive derivations

23809 18.6.7.1 Antipassive derivations and indefinite patients

23810 In Japhug, non-overt objects of (non-labile) transitive verb are always interpreted
 23811 as transitive, even when a particular verb form happens to lack unambiguous
 23812 markers of transitivity (§14.3.1). The minimal example (152) with the 1sg→3 Aorist
 23813 of *βzjoz* ‘learn’ could in principle be an intransitive form (due to the fact that the
 23814 past transitive -t suffix cannot surface with a close syllable stem, §14.3.2.1). Yet,
 23815 this example cannot mean ‘I studied something’ or ‘I went to school’, but neces-
 23816 sarily implies that the object has been previously mentioned in the discourse.

23817 (152) *χsui-sla pui-βzjoz-a*
 three-months AOR-learn-1SG

23818 ‘I have learned it (how to make ploughshares) for three months.’
 23819 (2010-09, 14)

23820 The antipassive derivations, which not only demote the object, but suppress
 23821 it syntactically (except for ditransitive verbs, see §18.6.4), are a way to express
 23822 a non-referential indefinite patient, either a non-specific patient (translatable as
 23823 ‘something’), or a whole range of possible patients. For instance in the case of
 23824 *rvtβzjoz* ‘learn things’, the implicit patient can be a school curriculum ('go to
 23825 school, study') as in (153) below and (131) above, or a non-specific topic ‘study
 23826 something’ as in (150) in §18.6.6.

23827 (153) *ntara nuu-p^he nutcu, χsui-xpa nuu pui-rv-βzjoz-a.*
 DEM:PL 3PL.POSS-DAT DEM:LOC three-years DEM PST-APASS-learn-1SG
 23828 ‘I have studied with them for three years.’ (160721 XpWN, 30)

23829 Example (154) also illustrates the contrast between the transitive verb *t^hu* ‘ask’³²
 23830 with an overt object *wzry nuu* ‘his own (question)’ and the corresponding anti-
 23831 passivized verb *rvt^hu* ‘ask questions’ with a non-specific patient (the prohibition
 23832 against asking additional questions anymore is not limited to the one he forgot
 23833 to ask).

³² Although *t^hu* ‘ask’ is ditransitive, since it has indirective alignment, it does not behave differently from monotransitive verbs regarding antipassivization (§18.6.4).

- 23834 (154) *uuz̥y nuu ky-nuu-tʰu na-nuu-jmuat jnu-ŋu, tceri nuu*
 3SG:GEN DEM INF-AUTO-ask AOR:3→3'-AUTO-forget SENS-be LNK DEM
 23835 *ma tu-ry-tʰu mui-nuu-jyŋ jnu-ŋu,*
 apart.from IPFV-APASS-ask NEG-AOR-be.allowed SENS-be
 23836 ‘He had forgotten to ask his own (question), but he was not allowed to
 23837 ask questions anymore.’ (divination, 2005, 48-9)

23838 In rarer cases, the demoted patient is referential and semantically recoverable
 23839 from the context. In (155b) for instance, by contrast with (154), the demoted pa-
 23840 tient of *rytʰu* ‘ask questions’ corresponds to the previous sentence (155a): taking
 23841 the context into consideration the verb form *ko-rytʰu-nuu* means ‘They consulted
 23842 the lama (about the reason why the man was about to die and what to do about
 23843 it)’.

- 23844 (155) a. *ty-tcuu nuu kuw-si to-ryŋgat.*
 23845 INDEF.POSS-son DEM SBJ:PCP-die IFR-be.about
 23846 ‘The man (had fallen ill) and was about to die.’ (rkongrgyal2.2002,
 24)
 23847 b. *βlama ny-car-nuu tce, ko-rytʰu-nuu ri*
 23848 lama IFR-search-PL LNK IFR-APASS-ask-PL LNK
 23849 ‘They looked a lama and consulted him/ask for his advice.’
 (rkongrgyal2.2002, 25)

23850 Similarly, in (156), the implicit patient of the verb *sy-ndza* ‘eat (someone)’ is not
 23851 ‘people’ in general, but rather the group of characters present at the moment of
 23852 the action with the demoness, and it is thus in fact partially referential.

- 23853 (156) *tce kuw-sy-ndza tu-oŋwiyu ri,*
 23854 LNK SBJ:PCP-APASS-eat IPFV-prepare LNK
 23855 ‘(The râkshasî demoness revealed her true nature) and was about to eat
 someone (one of them), but ...’ (28-smAnmi, 397)

23856 18.6.7.2 The contrast between *ry-* and *sy-* prefixes

23857 The semantic difference between the *ry-* and *sy-* antipassive prefixes involves a
 23858 contrast in humanity (following Sun 2006b on Tshobdun) and animacy.

23859 The *ry-* prefix is required for inanimate/abstract indefinite patients. In the case
 23860 of verbs of speech, the removed object corresponds to a reported speech com-
 23861 plement clause (as in 155b above, §24.2.5). Some *ry-* antipassives however have

23862 animate non-human patients, in particular *ryst̪crz* ‘castrate’ and *rynt̪hā* ‘butcher’
 23863 (from *ft̪crz* ‘castrate’ and *nt̪hā* ‘butcher’), which can only refer to animals.

23864 The *s-* prefix by contrast is mainly used to express generic human objects
 23865 (with a meaning often close to that of the generic object indexation marker *kua*
 23866 §18.6.8) or indefinite humans (sometimes even semantically recoverable from the
 23867 context, as in 156). However, the *s-* prefix when used as a propensity antipassive
 23868 can demote animal patients, as in (157) where *s-sat* is a stative verb meaning
 23869 ‘have killing power, be lethal’ (rather than ‘kill people’).

- 23870 (157) *tce nunu ju-l̪yt-nu* *tce tce nunu wuma zo* *jnu-sy-sat*
 LNK DEM IPFV-release-PL LNK LNK DEM really EMPH SENS-APASS-kill
 23871 [...] *qro ri jnu-xtci cti,* *tce nunu kua rcanu*
 pigeon also SENS-be.small be.AFF:FACT LNK DEM ERG UNEXP:DEG
 23872 *tua-kʰyl tce bniuz χsum jamar pjui-sat jnu-ŋu*
 one-place LOC two three about IPFV-KILL SENS-be
 23873 ‘They shoot with (scattering bullets), and it is very lethal, (...) the
 23874 pigeons are small, (with scattering bullets) they kill two or three
 23875 (pigeons) in one place.’ (28-CAmWGdW, 116)

23876 In addition, when both agents and patients are (non-human) animals, the pre-
 23877 fix *s-* can also be used to demote the object, as in the case of the verb *symtsʰi*
 23878 ‘lead the way’ (from *mtsʰi* ‘lead’) which can be applied to packs of animals. Note
 23879 also that the antipassive *syndza* from *ndza* ‘eat’, can both mean ‘eat someone’ (as
 23880 in 156 above) or ‘eat other animals’ as in (158a) (a sentence which can be glossed
 23881 by 158b).

- 23882 (158) a. *ruidas* *nua u-ŋgu* *kua-sy-ndza* *nua, kurŋi*
 wild.animals DEM 3SG.POSS-in SBJ:PCP-APASS-eat DEM beast
 23883 *tu-kua-ti* *ŋu*
 IPFV-GENR-say be:FACT
 23884 ‘Among the animals, the carnivorous ones are called ‘beasts’.
 23885 (elicited, explanation of example 33, §16.1.1.4)
 23886 b. *nua-zda* *ruidas u-kua-ndza* *tʰamtex̪t nuna*
 3PL.POSS-companion animal 3SG.POSS-SBJ:PCP-eat all DEM:PL
 23887 *nua-rmi* *lonba kurŋi tu-kua-ti* *ŋu.*
 3PL.POSS-name all beast IPFV-GENR-say be:FACT
 23888 ‘All ones that eat the other animals, their name is ‘beasts’.’ (150822
 23889 kWfNi, 8)

23890 The human vs. non-human contrast between the two prefixes can be observed
 23891 on a handful of verbs that are compatible with both *rr-* and *sr-* antipassives. The
 23892 indirective verb *tʰu* ‘ask’ takes the *rr-* prefix when the demoted patient is an
 23893 action/state of affair (as in *rvtʰu* ‘ask questions’ in 155b above), but takes the *sr-*
 23894 prefix when asking for someone in marriage (§18.6.4), as in (159).

- 23895 (159) *azə kui-sr-tʰu ce-a*
 1SG SBJ:PCP-APASS-ask go:FACT-1SG
 23896 ‘I am going to ask for (the girls) in marriage.’ (2003 Kumbzang, 5)

23897 A less lexicalized minimal pair is provided by *çar* ‘search’, which has the an-
 23898 tipassive forms *rrçar* ‘search for things’ and *srçar* ‘search for someone’.

23899 18.6.7.3 Avoidance

23900 The *sr-* antipassive can be used as a strategy to avoid overtly referring to a parti-
 23901 cular entity. In (160) for instance, despite the use of the antipassive *srnurtça* ‘tease
 23902 people’ (from *nurtça* ‘tease’), the implicit patient of this verb is not indefinite: it
 23903 is a type of local deity called *zubðas* (from གྲུབ་དྲྙ་ *gzi.bdag* ‘local deity’).

- 23904 (160) *tui-mui wuma zo ty-me tce, tcendyre*
 INDEF.POSS-weather really EMPH AOR-not.exist LNK LNK
 23905 *tsʰitsuku c-ku-sr-nurtca-nu tce, fsaŋ ra*
 some.things TRAL-IPFV-APASS-tease-PL LNK fumigation PL
 23906 *c-pjur-ta-nu, c-pjur-rjaš-nu nura tce, tce*
 TRAL-IPFV-put-PL TRAL-IPFV-dance-PL DEM:PL LNK LNK
 23907 *tui-mui ku-su-lxt-nu pjx-ŋgryl.*
 INDEF.POSS-weather IPFV-CAUS-release-PL IFR.IPFV-be.usually.the.case
 23908 *tce nuw u-syz-nyma yuŋ sytcʰa nuw znyryyma tu-ti-nu*
 LNK DEM 3SG.POSS-OBL:PCP-make GEN place DEM placename IPFV-say-PL
 23909 *nuw-ŋu*
 SENS-be
 23910 ‘When there was no rain at all, people would go there and do teasing,
 23911 make fumigations and dance, and cause rain to come. They call the
 23912 place where these activities were performed *znyryyma*.’ (140522 Kamnyu
 23913 *zgo*, 246-252)

23914 Tshendzin explicitly provided the sentence (161) as a gloss to the verb form
 23915 *c-ku-sr-nurtça-nu* in this context.

- 23916 (161) *zuiþdab c-kú-wy-nurtca*
 mountain.god TRAL-IPFV-INV-tease
 23917 ‘One teases the mountain gods.’ (gloss of example 160).

23918 The ‘teasing’ in question refers to the belief that rain resulted from the wrath
 23919 of mountain deities. The aim of this ceremony, rather than appeasing the gods,
 23920 was to anger them. It has not been practiced for decades, and memory of this
 23921 practice only survives in this toponym *znyryyma*, whose etymology is discussed
 23922 in more detail in §16.1.3.10.

23923 18.6.7.4 Participial forms of antipassive verbs

23924 The subject participle of antipassive verb is the preferred strategy to build nom-
 23925 inals referring to persons with a particular activity or profession, as illustrated
 23926 by the forms in Table 18.9 (see also §16.1.1.7), or having a particular habit (see 107,
 23927 §5.5.5.2). These nominalized forms are frequently used but not lexicalized, and
 23928 their meaning is predictable from that of the base verb.

Table 18.9: Subject participles of antipassive verbs

Base verb	Subject participle of antipassive
<i>þzjoz</i> ‘learn’	<i>kui-ry-þzjoz</i> ‘learner, student, scholar’
<i>tṣuþ</i> ‘sew’	<i>kui-ry-tṣuþ</i> ‘tailor’
<i>rvt</i> ‘write, draw’	<i>kui-ry-rvt</i> ‘writer, painter’
<i>ntçʰa</i> ‘butcher’	<i>kui-ry-ntçʰa</i> ‘butcher’ (person who slaughters animals)
<i>suxçrt</i> ‘teach’	<i>kui-sy-suxçrt</i> ‘teacher’
<i>mtsʰi</i> ‘lead’	<i>kui-sy-mtsʰi</i> ‘leader’ (in a dance, of a pack of animals)

23929 Oblique participles (§16.1.3.10) also need to undergo antipassivization to be
 23930 used to derive nouns of instruments or of location without overt object. For
 23931 instance, the antipassive participle *w-z-rv-rvt* (3SG.POSS-OBL:PCP-ANTIP-write) is
 23932 used to express the meaning ‘writing implement, pen’ (§16.1.3.6).

23933 18.6.7.5 Reflexive use of the antipassive

23934 The indefinite patient interpretation is not the only meaning of the *rv-* antipassive
 23935 derivation. For instance, the verb *raxtci* ‘wash’ (vi) from *χtci* ‘wash’ (vt) does not
 23936 mean ‘wash things’ as could have been expected, but has a reflexive meaning

²³⁹³⁷ ‘wash one’s face’ or ‘have a shower/bath’ (see example 101, §19.7.5).³³ The regular
²³⁹³⁸ reflexive form *zγγχtci* ‘wash oneself’ is also attested with this verb (§18.3.1.5).

²³⁹³⁹ 18.6.8 Other strategies used to express indefinite patients

²³⁹⁴⁰ As a means of expressing indefinite patients, the antipassive derivations compete
²³⁹⁴¹ with five alternative constructions: indefinite object pronouns (§18.6.8.1), generic
²³⁹⁴² object nouns (§18.6.8.2), light verb constructions with action nominal (§18.6.8.3),
²³⁹⁴³ incorporation (§18.6.8.4) and pairs of denominal verbs (§18.6.8.5).

²³⁹⁴⁴ 18.6.8.1 Indefinite pronouns

²³⁹⁴⁵ Indefinite pronouns (§6.6), in particular *tʰuci* ‘something’ (§6.6.2) or *tsʰitsuku* ‘what-
²³⁹⁴⁶ ever’ (§6.6.3) as object functionally overlap to some extent with the *rv-* antipa-
²³⁹⁴⁷ ssive derivations. However, indefinite pronouns are preferred if the indefinite pa-
²³⁹⁴⁸ tient is referential, as in (162).³⁴

- ²³⁹⁴⁹ (162) *wzo kuu tsʰitsuku jnx-ndum tce kʰyndum ra jnx-βzu*
²³⁹⁵⁰ 3SG ERG whatever IFR-read LNK recitation PL IFR-read
²³⁹⁵¹ ‘He recited something, he recited a formula.’ (140510 sanpian yumao-zh,
 100)

²³⁹⁵² 18.6.8.2 Generic marking

²³⁹⁵³ The generic noun *turme* ‘person’ (§6.2.2) and generic person indexation of the
²³⁹⁵⁴ object (§14.3.2.5) compete with the *sv-* antipassive. As shown by examples (163)
²³⁹⁵⁵ and (164)³⁵ the meaning of the antipassive *svmtsuy* ‘bite’ (‘be a biting/stinging
²³⁹⁵⁶ entity’) and that of the generic object *kuu-mtsuy* ‘X bites people’ in the Factual
²³⁹⁵⁷ are very close semantically. The antipassive of propensity, being a stative verb,
²³⁹⁵⁸ is however more often used in a comparative construction such as that in (163)
²³⁹⁵⁹ (§26.3.1.4). Example 134 above (§18.6.2) presents a minimal pair of the same type.

³³A typologically similar irregularity is found with the antipassive-durative verb *niza-lā* ‘wash oneself’ in Bezhta (Khalilova et al. 2016: 554).

³⁴Examples of antipassive verbs with referential implicit patient are however attested, as in (156) and (155b) above.

³⁵On the absence of dual indexation on *kuu-mtsuy* ‘they bite people’, see §14.3.2.5 and §14.6.1.

- 23960 (163) *mts^hal_yrum nuu yuu u-rme tu ri, [...] mts^hal_ypas nuu*
 nettle.sp DEM GEN 3SG.POSS-hair exist:FACT LNK nettle.sp DEM
 23961 *st^huci my-sy-mtsuy.*
 much NEG-APASS:PROP-bite:FACT
 23962 ‘Although the white nettle has hairs, it does not sting as much as the
 23963 black nettle.’ (19-mtshalu2, 6)
- 23964 (164) *mts^hal_ypas c^ho mts^hal_yrum nuu vna_na kui kui-mtsuy*
 nettle.sp COMIT nettle.sp DEM both ERG GENR:S/O-bite:FACT
 23965 ‘Both black and white nettle sting.’ (11-mtshalu, 26)

23966 18.6.8.3 Nominal+light verbs collocation

23967 Collocations involving transitive light verbs and their objects have a functional
 23968 overlap with antipassive verbs, when their objects, either action nominals or
 23969 nouns describing the product of the action, are generic and not referential. For
 23970 instance, the collocation *tx-çp^hyt+ta* ‘patch, make patches’ (from the inalienable
 23971 noun *tx-çp^hyt* ‘patch’ and the transitive verb *ta* ‘put’) has a meaning close to that
 23972 of the antipassive *rxçp^hyt* ‘patch clothes’ (from *çp^hyt* ‘patch’, the verb from which
 23973 the noun *tx-çp^hyt* itself is derived, §16.4.6) when the possessive prefix on *tx-çp^hyt*
 23974 is indefinite. As illustrated by example (165), where the participial form of this
 23975 collocation *tx-çp^hyt u-kui-ta* ‘(person) who makes patches’ occurs in opposition
 23976 to the participle of an antipassive verb *kui-rx-tsuiß* ‘(person) who sews clothes,
 23977 taylor’.

- 23978 (165) *tc^heme [tx-çp^hyt u-kui-ta] kui-xteu~xtci*
 woman INDEF.POSS-patch 3SG.POSS-SBJ:PCP-put SBJ:PCP-EMPH~be.small
 23979 *pjy-tu ma nuu ma kui-rx-tsuiß pjy-me.*
 IFR.IPFV-exist LNK DEM apart.from SBJ:PCP-APASS-sew IFR.IPFV-not.exist
 23980 ‘There were a few women who made patches, but no (women) tailors.’
 23981 (12-kAtsxWb, 12)

23982 The collocation *tx-çp^hyt+ta* can however occur with a 3SG possessive prefix on
 23983 the object *u-çp^hyt+ta* and refer to a definite patient, encoded as possessor of the
 23984 object.

23985 Other light verbs occurring in this type of collocation include *βzu* ‘make’, *h_t*
 23986 ‘release’ and *tçrt* ‘take out’ (see 75, §20.10.1).

18.6.8.4 Incorporating verbs

Object-saturating incorporating verbs (§20.13.3.2) are intransitive verbs derived from transitive bases whose intransitive subject corresponds to the subject of the base verb. The incorporated noun corresponds to the object of the base verb, and is indefinite and non-referential, and thus functionally close to an antipassive, in particular to lexicalized ones (§18.6.3).³⁶ For instance, the incorporating verb *yu<piāozi>fsor* ‘earn money’ from 票子 <piāozi> ‘ticket, paper money’ and *fsor* ‘earn’ has a meaning and usage identical to the antipassive *rɔfsor* ‘earn money’.

18.6.8.5 Denominal pairs

Transitive denominal verbs with the *nuu-/ny-* prefix can in some cases have *syr-* antipassives (§18.6.2), but never *ry-* antipassives. Instead, intransitive *ruu-/ry-* denominal verbs from the same noun occur as the functional equivalents of the antipassive. For instance, the transitive verb *nyma* ‘do’ (work) derived by the prefix *ny-* (§20.7.2) from the inalienably possessed noun *ta-ma* ‘work’ (§5.1.2.1), does not have an antipassive form such as *†ry-nyma*. Rather, the intransitive *ryma* ‘do work’ from the same noun (see example §19.1.5, §35 and 171, §16.2.1.7) occurs to express the meaning that would have been expected from such an antipassive form (§20.4.3). In addition to the semantic similarity with antipassive verbs, *ryma* ‘do work’ is compatible with non-periphrastic Past Imperfective and Inferential Imperfective (§21.5.3) like antipassive verbs (§18.6.6).

18.6.9 Compatibility with other derivations

The *syr-* antipassive derivation can be take as input applicative and tropative verbs. The most commonly attested examples of double derivations are however from verbs whose applicative or tropative prefix is synchronically unanalyzable, such as *syrnykʰu* ‘invite people’ (166) and *synykh'e* ‘bully people’ (167) from *nykʰu* ‘invite’ (lexicalized applicative of *akʰu* ‘call’, §17.4.3) and *nykʰe* ‘bully’ (lexicalized tropative of *kʰe* ‘be stupid’, §17.5.3), respectively.

- (166) *nua-ɛjor* *ra kur tu-ndzi* *tu-βzu-nuu* *nura*,
 3PL.POSS-servant PL ERG NMLZ:ACTION-eat IPFV-make-PL DEM:PL
 nua-sy-nykʰu-nuu *ra pŷr-cti* *qʰe*,
 IPFV-APASS-invite-PL PL IFR.IPFV-be.AFF:FACT LNK
 ‘Their servants were making food, they were inviting people.’

³⁶This closeness in function is also correlated with a closeness in origin, since both incorporating verbs and antipassive derivation come from denominal derivations (§20.13.1).

24017 (28-qAjdoskAt, 136-137)

- 24018 (167) *nx-tuu-sy-nxk^he* *nuu my-ra*
 2SG-NMLZ:DEG-APASS-bully DEM NEG-be.needed:FACT
 24019 ‘You should not bully people like that (your bullying of other people
 24020 should not cross the line).’ (28-qAjdoskAt, 14)

24021 Antipassive forms from non-lexicalized applicative and tropative verbs are not
 24022 attested in the corpus, but can be elicited, for instance *sy-nuu-rga* APASS-APPL-
 24023 like ‘like people’ from *nurga* ‘like’ (vt) (§17.4.1.2) and *sy-nx-mpçrr* APASS-TROP-
 24024 be.beautiful ‘find people beautiful’ from *nxmpçrr* ‘find beautiful’ (§17.5).

24025 Only one causative verb takes the *ry-* antipassive: *jts^hi* ‘give to drink’ (§18.6.4),
 24026 an irregular causative from *ts^hi* ‘drink’ (§17.2.2.5), which competes with the regu-
 24027 lar one *sui-ts^hi* ‘make/let drink, drink with’.

24028 Other causative verbs are only attested with the *sy-* antipassive, for instance
 24029 *sy-sui-rtob* APASS-CAUS-look) ‘show to people’. The lexicalized causative *nusuk^ho*
 24030 ‘rob, extort’, which historically derives from *k^ho* ‘give’ by the combination of the
 24031 sigmatic causative *sui-* and the autive *nu-* prefixes (see 15, §17.2.3), has two *sy-* an-
 24032 tipassive forms (§18.6.4): the *sy-* can be directly prefixed to the complex verb stem
 24033 as in *synusuk^ho* ‘rob people’ (168) (historically *sy-nu-sui-k^ho* APASS-AUTO-CAUS-
 24034 give), but the alternative form *nu-sy-sui-k^ho* (AUTO-APASS-CAUS-give) with the au-
 24035 tive prefix *nu-* switching position with the antipassive is also possible (§19.1.6).

- 24036 (168) *icq^ha* *tcaχpa nura ku li, laxtc^ha*
 the.aforementioned robber DEM:PL ERG again thing
 24037 *z-ny-sy-nusuk^ho-nuu*
 TRAL-IFR-APASS-rob-PL
 24038 ‘The robbers had gone and robbed some people from their things.’
 24039 (140512 alibaba-zh, 113)

24040 Applicative verbs can serve as input for the sigmatic causative derivation.
 24041 With the *ry-* antipassive, the *z-* allomorph of the causative is selected (§17.2.1.1) as
 24042 in *z-ry-ryt* (169) and *z-ry-tṣuβ* (170) from *rryrt* ‘write/draw things’ and *rrytṣuβ* ‘sew
 24043 things’ (antipassives of *rvt* ‘write, draw’ and *tṣuβ* ‘sew’, respectively, §18.6.1).

24044 In combination with the antipassive, both the permissive/precative ‘make X,
 24045 let X, ask to X’ (as in 169) and the instrumental ‘X with’ (170) uses of the sigmatic
 24046 causative are attested.

- 24047 (169) *Dai.Song yu, n̥kinui, u-caxpu nuu kuu p̥y-wy-sqyr tce,*
 ANTHR GEN FILLER 3SG.POSS-friend DEM ERG IFR-INV-ask.to.do LNK
 24048 *n̥kinui, pj̥y-wy-z-ry-ryt jnu-ŋu*
 FILLER IFR-INV-CAUS-APPL-draw SENS-be
 24049 ‘One of Dai Song’s friend’s asked him to draw something.’
 24050 (2010-kewen-07, 10)
- 24051 (170) *tce nuu tx-ri jná-wy-nui-βzu tce*
 LNK DEM INDEF.POSS-thread IPFV-INV-AUTO-make LNK
 24052 *cʰūi-wy-z-ry-tsufβ ŋu*
 IPFV-INV-CAUS-APASS SEW:FACT
 24053 ‘One (can) then make the thread and use it to sew things.’ (13-tAsAsqAri,
 24054 40)

24055 18.7 Distributed property

24056 The *amu-* prefix expressing a distributed property can be applied to a handful of
 24057 transitive and semi-transitive verbs.

24058 With the cognition verbs *suz* ‘know’ and *tso* ‘know, understand’ (semi-transi-
 24059 tive, see §14.2.3), the meaning of this derivation is ‘be Xed by everybody, be
 24060 Xable’, as shown by *amutso* ‘be clear (of speech)’ (171) and *amusuz* ‘be well-
 24061 known’.

- 24062 (171) *nuu tu-kui-ti tce myzui amui-tso.*
 DEM IPFV-GENR-say LNK even.more DISTR-understand:FACT
 24063 ‘If one says this, it is clearer (easier to understand).’ (heard several times
 24064 during elicitation sessions)

24065 The verb *amutso* also has a reciprocal reading ‘understand each other’, corres-
 24066 ponding to the *amu-* reciprocal derivation (example 95, §18.4.2). It is possible that
 24067 *amutso* was the pivot form between the two derivations. A reanalysis from recip-
 24068 ical to ‘distributed property’ may have taken place through the causative of the
 24069 reciprocal *sui-ymui-tso* ‘cause people to understand each other’, which originally
 24070 took as objects causee (see 172) and as optional semi-object the speech/words.

- 24071 (172) *a-pi cʰo a-bi ni*
 1SG.POSS-elder.sibling COMIT 1SG.POSS-younger.sibling DU
 24072 *k̥y-sui-ymui-tso-t-a-ndzi*
 AOR-CAUS-RECIP-understand-PST:TR-1SG-DU
 24073 ‘I helped my elder and younger brothers/sisters understanding each

24074 other' (elicited)

24075 The semi-object was then reinterpreted as the object, and forms such as *ta-su-*
 24076 *rmuu-tso* in (173) were then reinterpreted as meaning ‘cause (words) to be under-
 24077 standable’ rather than ‘cause people to understand (words)’.³⁷ The distributed
 24078 property meaning of *amu-* was then created by back-formation from this causa-
 24079 tive form.

- 24080 (173) *tua-rju* *ta-su-ymuu-tso*
 INDEF.POSS-word AOR:3→3'-CAUS-???-understand
 24081 ‘He spoke clearly’. (Literally: ‘He made the words understandable’;
 24082 elicited)

24083 When occurring on other verbs, however, the *amu-* prefix expresses that the
 24084 action spreads everywhere (within a particular location), without external agent.
 24085 The verb *amu-rmbuu* (derived from *rmbuu* ‘pile up’) is specifically used to describe
 24086 food piled up high in a container (bowl or pot) to the point of filling it up com-
 24087 pletely, as in (174), in particular as the result of cooking.

- 24088 (174) *fsosoz* *ndyre, tx-amui-rmbuu zo.*
 next.morning LNK AOR-DISTR-pile.up EMPH
 24089 ‘The next morning, (the bowl) was completely filled (with food).’
 24090 (2003kandZislama, 145)

24091 The verb *amu-zwyr* (from *zwyr* ‘burn’) occurs to refer to the (non-controlled)
 24092 spread of fire, as in (175).

- 24093 (175) *tanji* *tx-ye* *tce yndzxb a-mx-tx-luy*
 drought AOR-come[II] LNK fire.hazard IRR-NEG-PFV-come.off
 24094 *ra* *ma juu-ymuu-zwyr mbat*
 be.needed:FACT LNK IPFV-DISTR-burn be.easy:FACT
 24095 ‘When there is a drought, there should not be a fire as it can spread
 24096 easily (it this case).’ (elicited)

24097 It is also used metaphorically to describe the spread of information as in (176).
 24098 This example illustrates two verbs with distinct sub-functions of the distributed
 24099 property *amu-* prefix occurring with a common subject, suggesting a path of
 24100 reanalysis from the first sub-function (‘be known by everybody’ → ‘be known to
 24101 everybody’) to the second one (‘be Xed everywhere’).

³⁷Note that the meanings of the causative *su-ymuu-tso* are correlated with different orientation prefixes: EASTWARDS when meaning ‘cause to understand each other’ and ‘up’ when meaning ‘speak clearly’.

- 24102 (176) *kuki yuu u-tcha numuu, nuccimuma zo r̥y̥lkʰyβ*
DEM.PROX GEN 3SG.POSS-news DEM immediately EMPH kingdom
24103 *nutcu jy-k-ymuu-zwyr-ci tce jy-k-ymuu-suaz-ci.*
DEM:LOC IFR-PEG-DISTR-burn-PEG LNK IFR-PEG-DISTR-know-PEG
24104 ‘The news about this spread in the whole kingdom (like fire) and
24105 became known to everyone.’ (150820 meili de meiguihua-zh, 84)

24106 The verb *amuzyut* ‘be evenly distributed’, derived from the motion verb *zyut*
24107 ‘reach, arrive’, also illustrates the spatially distributed meaning of the prefix *amu-*
24108 (originally ‘reach everywhere’). Note that despite the fact that the root *zyut* gene-
24109 rally causes a /u/ → /y/ vowel change on derivational and inflectional prefixes
24110 directly attached to it (§14.2.2), it is not the case with *amu-*.

24111 This verb *amuzyut* mainly occurs in a serial verb construction (§25.4.1). In
24112 (177), it shares the same subject and TAME category as the following verb *juu-łor*
24113 ‘(it) comes out’. It expresses the manner in which the action takes place, and has
24114 to be translated as the adverb ‘evenly’.

- 24115 (177) *tx-ndyr numuu, [...] nuu-βri rcanuu,*
INDEF.POSS-pustule DEM 3PL.POSS-body UNEXP:DEG
24116 *kuu-so nuu-me zo, nuu-ymuu-zyut zo*
SBJ:PCP-be.empty IPFV-not.exist EMPH IPFV-DISTR-reach EMPH
24117 *nuu-łor nuu-ŋu.*
IPFV-come.out SENS-be
24118 ‘The pustules (...) come out evenly everywhere on their body, without
24119 any empty spot.’ (27-kharwut, 63-64)

24120 When occurring with a transitive verb in this serial verb construction, the sig-
24121 matic causative form *symuzyut* ‘do evenly’ is used instead, as in (178) (§25.4.1.3).

- 24122 (178) *tce tamar kumy, nyki tcʰorzi nuu u-myu me,*
LNK butter also FILLER alcohol.jar DEM 3SG.POSS-opening whether
24123 *uu-qaa me nuura nuu-su-ymuu-zyut zo*
3SG.POSS-bottom whether DEM:PL IPFV-CAUS-DISTR-reach EMPH
24124 *nuu-mar nuu-ra*
IPFV-smear SENS-be.needed
24125 ‘(The jar maker) also to apply butter evenly to the opening and the
24126 bottom of the alcohol jar.’ (30-kWrAfcAr, 65-66)

24127 The distributed property *amu-* prefix is restricted to a handful of very lexical-
24128 ized verbs. Hence, if the hypothesis of reanalysis from reciprocal presented above

24129 is valid, this process must have taken place in the remote past. The opposite hy-
 24130 pothesis of reanalysis from the distributed property function to the reciprocal
 24131 function also deserves to be taken into consideration.

24132 18.8 Proprietive

24133 The proprietive *syy-* prefix³⁸ derives stative verbs from verbs of perception, feeling
 24134 or some verbs of involuntary action. Table 18.10 presents representative examples
 24135 of this derivation, which include some loanwords from Tibetan (*scit* ‘be happy’,
 24136 *rga* ‘like’ and *bzɪ* ‘be drunk’ from ས୍କ୍ରିଡ୍ *sk'ɪd* ‘be happy’, པ୍ଗା *dga* ‘like’ and ར୍ବି *bzi* ‘be
 24137 drunk’, respectively), showing that the proprietive prefix is productive.

24138 The base verbs are mainly intransitive (proprietive verbs derived from semi-
 24139 transitive and transitive verbs are treated in §18.8.3 and §18.8.4), and encode as
 24140 subject the experiencer (*mu* ‘be afraid’, *scit* ‘be happy’) or a patientive argument
 24141 suffering from the action (*cke* ‘get burned’, *ŋgio* ‘slip’).

24142 The proprietive derivation removes this experiencer or patientive argument
 24143 from the argument structure and promotes instead the stimulus to subject status.
 24144 Compare for instance the base verb *mu* ‘be afraid’ whose subject is the experi-
 24145 ence feeling fear (179) with the proprietive *syymu* ‘be frightening’ (180) whose
 24146 subject is the entity causing fear to people.

- 24147 (179) *nua rg̥tpu nua pjy-mu tce,*
 DEM old.man DEM IFR.IPFV-be.afraid LNK
 24148 ‘The old man was afraid.’ (140426 xiaohaizi he hua de shizi-zh, 10)

24149 Example (180) also shows that the subject of the proprietive verb *syy-mu* is the
 24150 same referent as the object of the applicative verb *nuy-mu* ‘be afraid of’ derived
 24151 from the same verb root (§17.4.1).

- 24152 (180) *sunŋgi numua pjy-syy-mu tce pjy-nuy-mu*
 lion DEM IFR.IPFV-PROP-be.afraid LNK IFR.IPFV-APPL-be.afraid
 24153 *nua-ŋju.*
 SENS-be
 24154 ‘The lion_i was terrifying and (the old man) was afraid of it_i.’ (shizi yu
 24155 nongfu-zh, 7)

³⁸This category was previously referred to as ‘deexperiencer’ in previous publications, such as Jacques (2012c).

Table 18.10: Examples of proprietive verbs in Japhug

Base verb	Derived verb
<i>mtsur</i> ‘be hungry’	<i>srysmtsur</i> ‘be a famine’
<i>ŋgio</i> ‘slip’	<i>sryŋgio</i> ‘be slippery’
<i>asdyt</i> ‘slip’	<i>sasdyt</i> ‘be slippery’
<i>çke</i> ‘get burned’	<i>sryçke</i> ‘be burning’
<i>scit</i> ‘be happy’	<i>srysicit</i> ‘be pleasant’
<i>βzi</i> ‘be drunk’	<i>sryβzi</i> ‘be very intoxicating’
<i>nat</i> ‘be tired’	<i>srynat</i> ‘be exhausting’
<i>mu</i> ‘be afraid’	<i>srymu</i> ‘be frightening’
<i>duy</i> ‘have enough of’	<i>sryduy</i> ‘be unpleasant’
<i>rga</i> ‘like’	<i>sryrga</i> ‘be adorable’
<i>tso</i> ‘know, understand’	<i>srytso</i> ‘be understandable’
<i>nryz</i> ‘dare’	<i>srynrz</i> ‘be such that people dare to’
<i>cʰa</i> ‘can’	<i>srycʰa</i> ‘be such that people can’
<i>mto</i> ‘see’	<i>srymto</i> ‘be visible’
<i>suz</i> ‘know’	<i>srysuz</i> ‘be known’
<i>spa</i> ‘be able to’	<i>sryspa</i> ‘be known’
<i>mtsʰym</i> ‘hear’	<i>srymtsʰym</i> ‘be audible’
<i>rndu</i> ‘obtain’	<i>sryrndu</i> ‘be easy to find’
<i>nuzduy</i> ‘worry about’	<i>srynuzduy</i> ‘causing people to worry’

24156 A minority of proprietive verbs allow the demoted experiencer to be encoded
 24157 with the genitive, for instance *srysicit* ‘be pleasant’ (from *scit* ‘be happy’) in (181),
 24158 which takes as oblique experiencer *azuy* 1SG:GEN.

- 24159 (181) *nunuu u-tcuu nuu fso tʰui-wxti tce tha azuy*
 24160 DEM 3SG.POSS-son DEM in.the.future AOR-be.big LNK later 1SG:GEN
my-sy-scit
 24161 NEG-PROP-be.happy:FACT
 24162 ‘When his son has grown up, it will not be a pleasant situation for me.’
 (28-smAnmi, 18)

24163 In the case of the intransitive verbs *mtsur* ‘be hungry’ and *çpas* ‘be thirsty’, the
 24164 proprietive derivation removes the experiencer from the argument structure of

24165 the verb without adding a stimulus and the resulting proprietive verbs *syrmtsur*
 24166 ‘be a famine’ and *srycpas* ‘be a lack of drink’ have dummy subjects, as in (182).

- 24167 (182) *tua-xpa tce, wuma pjx-sy-mtsur*
 one-year LNK really IPFV.IFR-PROP-be.hungry
 24168 ‘One year, there was a famine.’ (elicited)

24169 18.8.1 Allomorphy

24170 The main allomorph of the proprietive prefix is *syr-*. The variant *sa-* occurs when
 24171 prefixed on a verb stem containing a cluster with a uvular preinitial (§3.5.4).

24172 The proprietive prefix, like other derivations (§17.2.1.4)), had at an earlier stage
 24173 the allomorph *sry-* with intrusive *-y*, but it ceased to be productive and remains
 24174 on only three verbs: *srynat* ‘be exhausting’, *srymu* ‘be frightening’ and *sryduy* ‘be
 24175 unpleasant’.

24176 18.8.2 Proprietive derivation and generic marking

24177 With verbs that can undergo proprietive derivation (see above), the generic in-
 24178 transitive subject *kua-* form and proprietive have overlapping uses.

24179 In (183), the generic form *kua-ŋgio* ‘one will slip’ expresses a potential conse-
 24180 quence of the state described by the proprietive verb *jui-sy-aðyt* ‘it is slippery’.
 24181 A semantic commonality between generic and proprietive verb forms in this ex-
 24182 ample is that both refer to an action to which all humans (including speaker and
 24183 addressee) are potentially subjected.

- 24184 (183) *nunutcu pjú-wy-rytcaš a-pui-ŋu tce, [...] zgruy zo*
 DEM:LOC IPFV-INV-tread IRR-IPFV-be LNK certainly EMPH
 24185 *kua-ŋgio cti ma, nunui jui-sy-aðyt*
 GENR:S/O-ACAU:glide be.AFF:FACT LNK DEM SENS-PROP-slip
 24186 *kua-fse.*
 SBJ:PCP-be.like
 24187 ‘If one walks on it (the moss), one will certainly slip, as it is slippery.’
 24188 (03-zhenzhuquan-zh, 23)

24189 With experiencer and modal verbs, the semantic closeness of generic and pro-
 24190 prietive is even more obvious, if one compares for instance the generic of *nryz*
 24191 ‘dare’ (184) with the proprietive *srynyz* ‘be such that people dare to’ in (185): the
 24192 experiencer argument of the base verb that has been demoted by the proprietive
 24193 derivation is by default interpreted as generic, unless it can be recovered from
 24194 the context, or expressed by an oblique case as in (181) above.

- 24195 (184) [ky-ndza] *mw-pw-kw-nvz* *ma syndy*
 INF-eat NEG-PST.IPFV-GENR:S/A-dare LNK be.poisonous:FACT
 24196 *tu-ti-nw* *pw-ŋu.*
 IPFV-say-PL SENS-be
 24197 ‘We/people would not dare to eat it, because they say that it is
 24198 poisonous.’ (19-khWlu, 87)

24199 In (185), note that generic reference is expressed by the proprietive derivation
 24200 on *mw-sy-nvz* ‘one does not dare to...’ and by the generic possessor on *tua-jas* ‘one’s
 24201 hand’ in the immediately following clause.

- 24202 (185) *tce [ky-njjas]* *mw-sy-nvz* *zo ma tua-jas*
 LNK INF-touch NEG-PROP-dare:FACT EMPH LNK GENR.POSS-hand
 24203 *ku-otsa cti tce mwym.*
 IPFV-prick.into be.AFF:FACT LNK hurt:FACT
 24204 ‘It is such that people do not dare to touch it, as it pricks in one’s hand
 24205 and it hurts.’ (15-babW, 58)

24206 In addition, both the generic and the proprietive can serve as a indirect way to
 24207 express first person (§14.6.1.4), as shown by examples (186) and (187), where the
 24208 generic *nw-kw-duy* and proprietive *nw-sy-duy* have exactly the same meaning
 24209 ‘be fed up with X, don’t feel like X’. In both cases, the implicit experiencer is the
 24210 1SG referent mentioned in the previous clause.

- 24211 (186) *nufse kw-nŋkw-nŋke ce-a ma tce kʰa ky-ryzi*
 like.that SBJ:PCP-DISTR:walk go:FACT-1SG LNK LNK house INF-stay
 24212 *ntsui nw-kw-duy*
 always SENS-GENR:S/O-have.enough.of
 24213 ‘I go to walk (without a special reason), because I don’t feel well staying
 24214 at home all the time.’ (conversation, 2013-12-24)

- 24215 (187) *kutcu azo-sti nw-cti-a tce*
 DEM:PROX:LOC 1SG-alone SENS-be.AFF-1SG LNK
 24216 *nw-sy-duy*
 SENS-PROP-have.enough.of
 24217 ‘I am here alone, and I am fed up of that (the fact of being alone make
 24218 one feel fed up).’ (07-deluge, 42)

24219 18.8.3 Proprietive derivations from semi-transitive verbs

24220 The proprietive derivation takes some semi-transitive verbs such as *duy* ‘have
 24221 enough of’, *tso* ‘know, understand’ or *rga* ‘like’ (§14.2.3) as input. In such cases,
 24222 the intransitive subject of the proprietive verb corresponds to the semi-object of
 24223 the base verb. For instance, in (188), the infinitival complement clause *nui kui-fse*
 24224 *kry-ryzi* ‘staying like that’ is semi-object of *duy* ‘have enough of’, while in (189) the
 24225 complement clause is the intransitive subject of *syy-duy* (the experiencer being
 24226 unexpressed in this clause).

- 24227 (188) [nui kui-fse kry-ryzi] nui-duy-a.
 24228 DEM SBJ:PCP-be.like INF-stay SENS-have.enough.of-1SG
 ‘I am fed up of living like that.’ (140426 jiagou he lang-zh, 36)

- 24229 (189) [kry-ryzi] wuma zo pju-syy-duy.
 24230 INF-stay really EMPH IFR.IPFV-PROP-have.enough.of
 ‘Living (there) was very difficult to endure.’ (150827 taisui-zh, 13)

24231 The semi-transitive modal verbs *c^ha* ‘can’ and *nryz* ‘dare’ also have proprietive
 24232 forms *syc^ha* ‘be such that people can’ and *snyryz* ‘be such that people dare to’
 24233 which select the same types of complement clauses as those selected by their
 24234 base verbs, as illustrated by (190) (see also 184) and (185) in §18.8.2 above). These
 24235 complement clauses are the intransitive subject of the proprietive verbs.

- 24236 (190) *tui-syi* [muntob bniuz xsum jamar lú-wy-ta_b]
 24237 one-day flower two three about IPFV:UPSTREAM-INV-weave
nui-sy-c^ha
 24238 SENS-PROP-can
 ‘In one day, it is possible to weave two or three patterns (on the belt).’
 24239 (2011-06-thaXtsa, 52)

24240 However, the complement clauses can be elided, and the subject participle
 24241 forms of the proprietive verbs can refer to an argument (generally object) of
 24242 the (elided or overt) verb in the complement clause. For instance in (191), the
 24243 participle *kui-sy-c^ha* can be translated as ‘(the mice) that can be (caught)’ (an elided
 24244 infinitive form such as *kry-ndo* INF-grab is implicit in this example).

- 24245 (191) βzui [...] , kur-sy-c^ha nura azo pju-sat-a ny,
 24246 mouse SBJ:PCP-PROP-can DEM:PL 1SG IPFV-kill-1SG be:FACT
m̥y-kui-sy-c^ha jy-kui-y<nu>ri nura nuzora kui
 24247 NEG-SBJ:PCP-PROP-can AOR-<AUTO>go[II] DEM:PL 2PL ERG

- 24247 *pur-sat-nuu ra* *ny*
 IMP-kill-PL be.needed:FACT SFP
 24248 ‘The mice, I will kill the ones that (I) can (get), but the one that (I) cannot
 24249 (get) and have gone away, you will have to kill them.’ (150831 BZW
 24250 kAnArRaR, 32)

24251 18.8.4 Proprietive derivations from transitive verbs

24252 The proprietive prefix occurs with some transitive verb stems, removing the transitive subject and converting the object argument to intransitive subject status,
 24253 like the passive, anticausative and object-oriented facilitative (§18.9.2) derivations.
 24254 Proprietive verbs derived from transitive verbs are rare: the derivational
 24255 *syr-* prefix on verbs is more often interpreted as an object-suppressing antipassive
 24256 (§18.6.2).

24257 In the case of the labile perception verb *mto* ‘see’, one could propose that the
 24258 proprietive form *syrmtō* ‘be visible’ derives from the stative intransitive use of this
 24259 verb (meaning ‘have sharp eyesight’, §14.5.1), but this is unlikely from a semantic
 24260 point of view (the meaning of *syrmtō* is not ‘be such that people have sharp eye-
 24261 sight’). The other transitive verbs deriving proprietive forms in Table 18.10 are
 24262 not labile, and no such ambiguity exists.

24263 The transitive verbs that can be subjected to the proprietive derivation belong
 24264 to four related semantic classes: verbs of perception (*mto* ‘see’, *mtsʰym* ‘hear’), of
 24265 cognition (*suuz* ‘know’, *spa* ‘be able to’), of obtaining (*rndu* ‘obtain’) and of evalua-
 24266 tion (*nuzduy* ‘worry about’, *saxpas* ‘respect’). All of these verbs have experiencer
 24267 or experiencer-like transitive subjects.

24268 The proprietive of verbs of perception and obtaining such as *syrmtsʰym* ‘be audi-
 24269 ble’ (192) and *syrndu* ‘be easy to find’ (193) express a potential state, semantically
 24270 close to the object-oriented facilitative (§18.9.2).

- 24272 (192) *tce sun̥gu ku-ryzi cti t̥yā ky-mto*
 LNK forest IPFV-stay be.AFF:FACT in.the.open OBJ:PCP-see
 24273 *me. ri [tu-mbri] nuu sx-mtsʰym.*
 not.exist:FACT LNK IPFV-make.noise DEM PROP-hear:FACT
 24274 ‘It stays in the forest and is never seen in the open, but it can be heard
 24275 singing.’ (23-scuz, 119-120)
- 24276 (193) *tui-mui mūj-lxt tce t̥yjm̥y mūj-sy-rndu*
 INDEF.POSS-sky NEG:SENS-release LNK mushroom NEG:SENS-PROP-obtain

24277

24278 ‘It is not raining, and so it is not easy to find mushrooms.’ (elicited)

24279 The proprietive of *suz* ‘know’ and *spa* ‘be able to’ both mean ‘be (widely)
 24280 known’, and mainly occur with the noun *tx-rmi* ‘name’, as in (194) and (195).

- 24281 (194) *u-rmi* *pui-sy-suz*
 3SG.POSS-name SENS-PROP-know
 24282 ‘His name is well-known.’ (elicited)

- 24283 (195) *myzui u-rmi* *my-kui-sy-spa* *xcat*
 again 3SG.POSS-name NEG-SBJ:PCP-PROP-be.able be.many:FACT
 24284 *cti*
 be.AFF:FACT

24285 ‘There are many other (plants) whose name is not known.’ (08-tWrgi, 54)

24286 The case of the verb *synuzduy* ‘causing people to worry’, which is derived
 24287 from applicative verb *nuzduy* ‘worry about’ (§17.4) is treated in §18.8.6.

24288 18.8.5 Lexicalized proprietive

24289 The meaning of some proprietive verbs is not entirely predictable from their base
 24290 verbs.

24291 The verb *cke* ‘get burned’ encodes as subject the entity that suffers from burn-
 24292 ing, as in (196). The expected meaning of its proprietive *sycke* would be ‘be burn-
 24293 ing’. While this meaning is indeed attested as in (197), *sycke* can also simply mean
 24294 ‘be hot’, concerning for instance the weather as in (198), without the implication
 24295 that people subjected to this weather suffer from burns.

- 24296 (196) *a-jas* *pui-cke*
 1SG.POSS-hand AOR-burn
 24297 ‘My hand was burnt.’ (elicited)

- 24298 (197) *smi t^ha-βluu-nuu* *ri, pjy-sy-cke* *q^he, zakastaka*
 fire AOR:3→3'-burn-PL LNK IFR.IPFV-PROP-burn LNK each.their.own
 24299 *jo-nuu-ryci-nuu* *q^he,*
 IFR-AUTO-pull-PL LNK
 24300 ‘They made a fire (and used their legs as tripods to make tea), but since
 24301 it was burning, and each of them pulled (their legs and were not able to
 24302 prepare food).’ (2014-kWLAG, 333)

- 24303 (198) <diandian> zo kui-ryzi *nur-muuctav, tu-kui-ηke tce*
 shop EMPH GENR:S/O-stay SENS-be.cold IPFV-GENR:S/O-walk LNK
 24304 *nur-sy-cke*
 SENS-PROP-burn
 24305 ‘Staying in the shop it is cold, but walking (on the street) it is hot.’
 24306 (conversation, 14-05-10)

24307 18.8.6 Compatibility with other derivations

24308 The proprietive derivation can take as input anticausative verbs (§18.5.6). For in-
 24309 stance, *srygio* ‘be slippery’ comes from *ŋgio* ‘slip’, itself from *kio* ‘cause to slip’.
 24310 The proprietive verb *srygio* expresses that the action of the base verb *kio* is pos-
 24311 sible due to the nature of the ground, as shown by (199).

- 24312 (199) *wi-t^hob* *nui-sy-ŋgio tce tcoχtsi nū-wy-kio*
 3SG.POSS-ground SENS-PROP-ACAU:glide LNK table IPFV-INV-glide
 24313 *nui-k^hwi*
 SENS-be.possible
 24314 ‘The ground is slippery, and one can move the table by making it glide
 24315 on it.’ (elicited)

24316 The verb *nuzduy* ‘worry about’ (which could be analyzed as a lexicalized ap-
 24317 plicative of *zduy* ‘suffer’, §17.4.1.5) has the *sy-* proprietive *sy-nuzduy* ‘causing peo-
 24318 ple to worry’, as shown by example (200), homophonous with an antipassive verb
 24319 meaning ‘worrying about people’.

- 24320 (200) *nx-wa nuat^hamtext zo t^hwi-wxti tce, nui kui-fse*
 2SG.POSS-father so.much EMPH AOR-be.big LNK DEM SBJ:PCP-be.like
 24321 [...] *cui-ky-yluylt [...] c^ha ci kuma, nui-sy-nui-zduy*
 TRAL-INF-fight can:FACT QU SFP SENS-PROP-worry.about
 24322 ‘Your father has become so old, can he go to war like that? He is cause of
 24323 worry (for all of us).’ (150828 huamulan-zh, 19)

24324 Proprietive verbs cannot be subjected to (sigmatic *su-* or velar *yv-*) causative
 24325 derivations. On the other hand, they can take the tropative *ny-* prefix, as shown by
 24326 the common verbs *nysyicit* ‘find pleasant’ and *nysyduy* ‘find unpleasant’ derived
 24327 from *syicit* ‘be pleasant’ and *syduy* ‘be unpleasant’, respectively (§17.5.4).

18.8.7 Relationship with other derivations

The proprietive *syr-*, like several other voice prefixes (§20.10), is related to the denominational *syr-* derivation (§20.10.2). It has a common origin with the antipassive *syr-* (§18.6.2; see in particular the propensative function of the antipassive).

The proprietive and the *syr-* antipassive are however synchronically quite distinct. While only the former can have intransitive or semi-transitive verbs as input, both can occur on transitive verbs, in which case the former is object-oriented (§18.8.4), while the latter is subject-oriented (§18.6.2).

18.9 Facilitative

Japhug has two productive facilitative derivations, the *yrr-* and *nuyu-* prefixes, deriving stative verbs whose subjects correspond to the subject and the object (or goal) of the base verbs, respectively. Cognates of both prefixes are found in Tshobdun (*wb-* and *nwa-*), with an identical functional constraint (Sun 2014a)

These prefixes are only valency-decreasing when prefixed to transitive verbs, and do not change transitivity when the base verb is intransitive.

The meaning of these prefixes is very similar to that of complement clauses headed by the stative verb *mbat* ‘be easy’ (§24.5.8). For instance, (201b) was provided as a gloss for (201a) during an elicitation session.

- (201) a. *pur-nuyuw-βzjoz*
 SENS-FACIL-learn
 b. *kyr-βzjoz pur-mbat*
 INF-learn SENS-be.easy

‘It is easy to learn.’ (elicited)

A third way of expressing facilitative meaning is by verb compounding; the only example of this type is *aprymbat* ‘be easy to do’ from the transitive verb *pa* ‘do’ and the stative verb *mbat* ‘be easy’ (§20.12).

18.9.1 Subject-oriented facilitative

The prefix *yrr-*, homophonous with the velar causative *yrr-* (§17.3), generally derives stative verbs meaning ‘become/get X easily’, ‘tend to become/get X’. For instance, from *wxti* ‘be big’ one can derive the stative verb *yrrwxti* ‘become big easily’, as illustrated by (202).

- 24357 (202) *si kur-wxtar~wxti nuu-βze cʰa ma wuma zo*
 tree SBJ:PCP-EMPH-be.big IPFV-grow[III] can:FACT LNK really EMPH
 24358 *nuu-γγ-wxti.*
 SENS-FACIL-be.big
 24359 ‘It can grow into a hug tree, as it easily becomes huge.’ (07-Zmbri, 10)

24360 The facilitative prefix *γγ-* is very productive on stative verbs, including on
 24361 loanwords from Tibetan. For instance, *rgrz* ‘be old’ (from 藏文 *rgas* ‘get old’) has a
 24362 facilitative form *γγrgrz* ‘age quickly’, attested in (203).

- 24363 (203) *turme mx-kui-jfuir, nunuu mx-kui-γγ-rgyz tce tce*
 people NEG-SBJ:PCP-change DEM NEG-SBJ:PCP-FACIL-be.old LNK LNK
 24364 *nunuu txtʰo tu-syrm̥i-nuu nyu.*
 DEM ANTHR IPFV-call-PL be:FACT
 24365 ‘Persons who don’t change, who don’t age quickly, people call them
 24366 ‘pines.’ (07-tAtho, 26)

24367 Some dynamic intransitive verbs are also attested with the *γγ-* derivation, with
 24368 meanings such as ‘X quickly/early/easily’ or ‘X often’. For instance, *mda* ‘be the
 24369 time’ derives the form *γγ-mda*, which can mean ‘be the time (ripen) earlier’, as in
 24370 (204), and *ruru* ‘get up’ has the facilitative *γγruru* ‘getting up early’, ‘getting up
 24371 easily’ (as soon as one wakes him/her up).

- 24372 (204) *nura izo ji-ji puu-ky-z-myku nuu izo*
 DEM:PL 1PL 1PL.POSS-field AOR-OBJ:PCP-CAUS-be.first DEM 1PL
 24373 *wi-pʰuit ku-z-myku-j ma*
 3SG.POSS-BARE.INF:cut IPFV-CAUS-be.first-1PL LNK
 24374 *nuu-γγ-mda*
 SENS-FACIL-be.the.time
 24375 ‘Our fields, that have been (sowed) first, we harvest they first, because
 24376 the (crops) ripen earlier (than in other places, higher up in altitude).’
 24377 (2010-09)

24378 It also occurs on some anticausative verbs (§18.5); for instance, the intransitive
 24379 *ngruu* ‘break’ has the facilitative form *γγ-ngruu* ‘easily break’, which has the same
 24380 meaning as the object-oriented facilitative *nuuyu-qruu* of the transitive base verb
 24381 *qruu* ‘break’ (§18.5.6). It is also attested with denominal verbs such as *symbbru* ‘get
 24382 angry’ (§20.3.1), whose facilitative is *γγsymbbru* ‘get angry easily’.

24383 The *γγ-* prefix is also found on intransitive verbs that only occur in colloca-
 24384 tion with a particular noun, for instance *nmu* ‘shake (of earthquakes)’ (on which

24385 see §19.7.1) or the collocation *w-βo + mbi* ‘be discouraged’ (§18.5, §22.4.3.2), from
 24386 which *yr-nmu* or *w-βo + yrmbi* ‘be easily discouraged’ can be derived (examples
 24387 205 and 206).

- 24388 (205) *icq^ha srte^ha nui wajuu jua-yr-nmu.*
 the.aforementioned place DEM earthquake SENS-FACIL-shake
 24389 ‘Earthquakes are frequent in this place.’ (elicited)

- 24390 (206) *ny-βo w-tuu-yr-mbi nui!*
 2SG.POSS-discourage(1) 3SG-NMLZ:DEG-FACIL-ACAUS:discourage(2) SFP
 24391 ‘You are so easily discouraged!’ (elicited)

24392 With the dynamic motion verb *ce* ‘go’, the facilitative *yr-ce* only occurs in col-
 24393 location with *tr-rzaš* ‘time’ in the meaning ‘pass quickly (of time)’, as in (207). In
 24394 this example, the facilitative applied to the whole collocation *tr-rzaš + ce* ‘spend
 24395 (one’s time)’ (§22.4.1)

- 24396 (207) *ny-tr-rzaš w-júu-yr-ce*
 2SG.POSS-INDEF.POSS-time QU-SENS-FACIL-go
 24397 ‘Is the time passing quickly for you?’ (elicited)

24398 The facilitative *yr-* is also attested on a handful of transitive experiencer verbs,
 24399 where it has an antipassive-like valency-decreasing function: *cuftaš* ‘remember’
 24400 and *jmut* ‘forget’ derive the stative verbs *yrčuftaš* ‘to have a good memory’ and
 24401 *yrjmut* ‘be forgetful’, respectively (208).

- 24402 (208) *jui-cqraš tce jui-yr-cuftaš*
 SENS-be.intelligent LNK SENS-FACIL-memorize
 24403 ‘He is intelligent, he has a good memory.’ (elicited)

24404 This derivation demotes the object, and the intransitive subject of the facilita-
 24405 tive verbs *yrčuftaš* and *yrjmut* corresponds to the transitive subject of the base
 24406 verb. In order to build a stative verb expressing a property of the stimulus/object
 24407 ‘to be easy to remember/forget’, the other facilitative prefix *nuyu-* is used instead
 24408 (§18.9.2). Hence, the prefix *yr-* can be described as a subject-oriented facilitative,
 24409 following Sun’s (2014a) description of the cognate prefix *wp-* in Tshobdun.

24410 18.9.2 Object-oriented facilitative

24411 The facilitative *nuyu-* prefix is one of the rare disyllabic derivational prefix in
 24412 Japhug. Like *yr-* (§18.9.1), it is used to build stative verbs meaning ‘be easy to

24413 X'. It is most commonly prefixed to transitive action verbs: a typical example
 24414 is for instance *nuyuu-kryy* 'be easy to shear' from *kryy* 'mow, shear', as in (209).
 24415 Additional examples are found in Table 18.11.

- 24416 (209) *tce qazo kui-wxti nura yu q^he, nu-rme pui-rpji*
 LNK sheep SBJ:PCP-be.big DEM:PL GEN 3PL.POSS-hair SENS-be.long
 24417 *q^he pui-nuyuu-kryy, kui-xtci nura yu, nu-rme*
 LNK SENS-FACIL-shear SBJ:PCP-be.small DEM:PL GEN 3PL.POSS-hair
 24418 *pui-xtut q^he, m^áuj-nuyuu-kryy.*
 SENS-be.short LNK NEG:SENS-FACIL-shear
 24419 'The big sheep, their wool is long and thus easy to shear, the small ones,
 24420 their wool is short and difficult to shear.' (160712 smAG, 28-29)

24421 When the base verb is transitive, the *nuyuu-* prefix is a valency-decreasing
 24422 derivation, removing the transitive subject, and turning the object into an in-
 24423 transitive subject. In (210) for instance, *nuyumto* 'be easy to see' appears in the
 24424 Factual third singular without stem III alternation, showing that it is an intransi-
 24425 tive verb (§14.3.1).

- 24426 (210) *ci nuu xcaj u-mdor tsa u-kuu-ndo nuu*
 INDEF DEM grass 3SG.POSS-colour a.little 3SG.POSS-SBJ:PCP-take DEM
 24427 *my-nuyuu-mto. tce wuma zo*
 NEG-FACIL-see:FACT LNK really EMPH
 24428 *mu~my-pui-kui-tso ny my-wy-mto*
 COND~NEG-PST.IPFV-GENR:S/O-understand LNK NEG-INV-see
 24429 'The other one, which has the colour of grass, is not easy to see; unless
 24430 you know it very well, you won't see it.' (07-Cku, 58)

24431 Among the verbs in Table 18.11, the facilitative *nuyujpa* 'be convenient' is par-
 24432 ticularly lexicalized, with both an irregular *-j-* element occurring between the pre-
 24433 fix *nuyuu-* and the root *|pa|*, and a non-predictable meaning derivation.

24434 In the case of the verb *ti* 'say', the facilitative *nuyuti* can either mean 'be easy
 24435 to pronounce' or 'be easy to express', as in example (211), uttered by Tshendzin
 24436 during an elicitation session.

- 24437 (211) *nuu m^áuj-nuyuu-ti*
 DEM NEG:SENS-FACIL-say
 24438 'This (meaning) is difficult to express (in Japhug).' (heard in context)

Table 18.11: Examples of the facilitative *nuyuu-* prefix in Japhug

basic verb	derived verb
<i>ŋke</i> ‘walk’	<i>nuyuŋke</i> ‘be easy to walk (on)’
<i>ŋga</i> ‘wear’	<i>nuyuŋga</i> ‘be nice to wear’
<i>ndza</i> ‘eat’	<i>nuyundza</i> ‘be easy/nice to eat’
<i>ntçʰoz</i> ‘use’	<i>nuyuṇtçʰoz</i> ‘be easy to use’
<i>mto</i> ‘see’	<i>nuyumto</i> ‘be easy to see’
<i>ti</i> ‘say’	<i>nuyuti</i> ‘be easy to say’
<i>çuftaş</i> ‘remember’	<i>nuyuçuftaş</i> ‘be easy to remember’
<i>jmut</i> ‘forget’	<i>nuyujmut</i> ‘be easy to forget’
<i>pa</i> ‘do’	<i>nuyuipa</i> ‘be convenient’

Some intransitive verbs are attested with the *nuyuu-* prefix. The only common one is *nuyuŋke* ‘be easy to walk (on)’ (from *ŋke* ‘walk’); the *nuyuu-* derivation appears to be possible on a few other motion verbs and verbs of location (such as *rjuŋ* ‘run’ or *rrzi* ‘stay’), though their acceptability has to be rechecked. The subject of the facilitative verbs derived from such intransitive verbs corresponds to the locative adjunct (212) or goal (213) of the base verb.

- (212) *tcʰeme nunu tʰylwa nuyunu* *zua* to-ce *qʰe*, *maka*
 girl DEM earth IDPH(II):soft LOC IFR:UP-go LNK at.all
u-my-tua-nuyuu-ŋke *pjy-saxab* *zo*,
 3SG.POSS-NEG-NMLZ:DEG-FACIL-walk PST.IPFV-be.extremely EMPH
 ‘The girl went up the (path made of) soft earth, and it was extremely difficult to walk on it.’ (2014-kWLAG, 148)

- (213) *t̪su u-rku* *nui-yrbat* *tce*, *nui-nuyuu-ce*
 path 3SG.POSS-side SENS-be.close LNK SENS-FACIL-go
 ‘(This place) is close to the road, it is easy to go to.’ (elicited)

The semi-transitive *tso* ‘know, understand’ (§14.2.3) can also undergo the facilitative derivation to *nuyutso* ‘easy to understand’. Semi-transitive verbs in *a-*, such as *are* ‘have to eat/drink’ or *atuy* ‘meet’, are not compatible with *nuyuu-*, which appears to lack an allomorph with vowel fusion; a form †*nuyuṛse* for instance (intended meaning: ‘easy to get to eat’) is utterly unacceptable.

Since semi-objects, goals and some locative adjuncts do have partial objectal properties (§8.1.5, §8.1.8, §8.1.6, §23.5.4, §23.5.5), it is nevertheless appropriate

24458 to describe *nuyuu-* as an object-oriented derivation, following Sun (2014a). The
 24459 contrast between *nuyuu-* and subject-oriented *yx-* is clearest with the transitive
 24460 verbs *jmut* ‘forget’ and *cuftar* ‘remember’, which can be subjected to both deriva-
 24461 tions: compare object-oriented *nuyujmut* ‘be easy to forget’ and subject-oriented
 24462 *yxjmut* ‘be forgetful’ (§18.9.1).

24463 It is possible to apply the facilitative derivation to an intransitive verb al-
 24464 ready derived by the sigmatic causative, for instance *nuyuu-suy-nax* (FACIL-CAUS-
 24465 be.black) ‘be easily blackened’. It is also possible to causativize a facilitative verb
 24466 (with the z- allomorph of the sigmatic causative, §17.2.1.1). For example, the cau-
 24467 sative of *nuyuntch'oz* ‘be easy to use’ is *z-nuyuu-ntch'oz* (CAUS-FACIL-use) ‘make easy
 24468 to use’. The relative order of the facilitative and of the causative prefixes thus
 24469 reflects their semantic scope (§17.2.8).

24470 19 Other verbal derivations

24471 19.1 Autive

24472 The autobenefactive-spontaneous or autive¹ prefix *nu-* is one of the most pro-
24473 ductive voice prefixes in Japhug.

24474 In this section, I first present the morphological properties of this prefix (allo-
24475 morphy and position in the template), and then describe its three main functions:
24476 autobenefactive/self-affectedness, spontaneous and permansive (previously iden-
24477 tified in Jacques 2015e). Finally, I discuss cases of lexicalized autives and propose
24478 historical pathways between the autive and other derivations such as the verti-
24479 tive and the anticausative.

24480 The anticausative derivation in Japhug does not cause any stem alternation,
24481 unlike in other languages such as Bragbar (Zhang 2020).

24482 19.1.1 The autive prefix and verb transitivity

24483 Unlike most voice markers, the autive prefix *nu-* neither increases nor decreases
24484 verb valency: whether the base verb is morphologically intransitive, transitive
24485 or labile, *nu-* prefixation has no effect on any of the seven transitivity criteria
24486 (§14.3.1).

24487 For instance, transitive verbs with *nu-* still have stem III alternation (§12.2.2.1,
24488 for instance *-ndo* → *-ndym* in 1) or the past tense *-t* suffix (§11.3, see *ty-nu-ndo-t-a*
24489 in 2).

- 24490 (1) *laŋjuŋ nyzo ty-nu-nndym je*
24491 staff 2SG IMP-AUTO-take[III] SFP
‘Take the staff.’ (2005 khu, 13)

- 24492 (2) *nyzo nykinua, ty-tur-nurdor, aj ty-nu-ndo-t-a me*
24493 2SG FILLER AOR-2-pick.up 1SG AOR-AUTO-take-TR:PST-1SG not.exist:FACT
‘It is you who collected (the fruits), I did not take them.’ (IWlu 2002, 51)

¹I adopt the concise and elegant term “autive” from Gong (2018) instead of “autobenefactive-spontaneous” used in previous publications (Jacques 2015e).

19 Other verbal derivations

Conversely, intransitive verbs taking the autive prefix present neither stem III alternation nor the *-t* suffix. The autive derivation differs in this regard from the homophonous *nu-* applicative prefix (§17.4).

19.1.2 Position in the verbal template and allomorphy

The position of the autive prefix in the template depends on the structure of the verb form.

If it occurs on a contracting verb (§12.3), the *nu-* prefix is inserted between the *a-* and the rest of the verb stem, even when the *a-* is not a prefix but part of the verb root (there is only one highly lexicalized counterexample, §19.1.6). For instance, in (3) the *nu-* is actually infixated inside the verb stem of *atyr* ‘fall’ (see also in example 29 in §19.1.4 the infixation within the suppletive stem II *ari* of the verb *ce* ‘go’). Although other homophonous prefixes exist in Japhug the autive is the only one that is infixable. All other *nu-* prefixes (the applicative §17.4, the vertitive §19.2, the denominal *nu-* §20.7, and inflectional morphemes like the 3PL possessive prefix §5.1.1 and the type A WESTWARDS orientation prefix §15.1.1.1) occupy prefixal slots and undergo vowel contraction with the *a-* of the verb stem (for instance, the applicative yields *nṛ-* with contracting verb stems, §17.4.2).

- (3) *nunuu u-yruu* *numuu t^bu-rgyz* *tce tce nuu uzo*
DEM 3SG.POSS-horn DEM AOR-be.old LNK LNK DEM 3SG
pjuu-γ<nuu>tvr *juu-ŋju*.
IPFV:DOWN-<auto>fall SENS-be

‘When its antlers age, they fall off by themselves.’ (27-qartshAz, 35)

The irregular existential verbs *yṛzu* ‘exist’ and *maje* ‘not exist’ (§14.2.2) also take the spontaneous marker as an infix rather than as a prefix as in (4).

- (4) *pakuku zo ju-nuice-nuu* *tce nutcu li γy<nuu>zü*
every.year EMPH IPFV-come.back-PL LNK there again <AUTO>exist:SENS
cti.
be.AFF:FACT
‘They come back every year, and it is still there.’ (20 grWBgrWB, 51)

In addition, like the inverse prefix (§14.3.2.7), the autive is obligatorily infixated within the progressive *asu-* (§11.2.2, §21.6.1.1), as in example (5).

- 24521 (5) <gaoyucheng> *kui* *wi-laxtc^ha* [...] *pui-a<nua>sur-fkur* *yui*
 ANTHR ERG 3SG.POSS-thing PST.IPFV-<AUTO>PROG-carry DEM
 24522 *wi-ŋui* *nutcu* *wi-jas* *c^hy-tsum* *ri,*
 3SG.POSS-inside DEM:LOC 3SG.POSS-hand IFR:DOWNTSTREAM-take.away LNK
 24523 ‘Gao Yucheng put his hand in the things (bag) that he was carrying on his
 24524 back.’ (150902 qixian-zh, 132)

24525 In all other cases (and excluding lexicalized autives, §19.1.6), the autive *nui-* 24526 occurs on the leftmost side of the verb stem, just before the reflexive (§18.3), but after 24527 inflectional prefixes (including orientational, participial, inverse and person in- 24528 dexation prefixes), as shown by the forms *tu-nui-zy়-raχtেৰz-i* ‘we treat ourselves’ 24529 in (6) and *a-ty-tú-wy-nui-ndza* in (7).

- 24530 (6) *tce ji-ky-nui-raχtেৰz* *ra jy-ye-nui,* *izora*
 LNK 1PL-OBJ:PCP-AUTO-cherish PL AOR-come[II]-PL 1PL
 24531 *tu-nui-zy়-raχtেৰz-i,*
 IPFV-AUTO-REFL-cherish-1PL
 24532 ‘When people we cherish come, or when we (wish) to treat ourselves,’ (30
 24533 macha, 74)

- 24534 (7) *tu-tú-wy-ndza wi-nui-suisym* *q^be a-ty-tú-wy-nui-ndza*
 IPFV-2-INV-eat QU-IPFV-think[III] LNK IRR-PFV-2-INV-AUTO-eat
 24535 *nui-nts^hi*
 SENS-be.better
 24536 ‘If it wants to eat you, let it eat you!’ (150901 dongguo xiansheng he
 24537 lang-zh, 100)

24538 When occurring in this leftmost slot, forms bearing the autive prefix can be
 24539 ambiguous: for instance the surface form *nui-ce* (from the verb *ce* ‘go’) can ei-
 24540 ther be parsed as 3SG Factual autive (AUTO-go:FACT), 3SG Factual vertitive (§19.2,
 24541 (VERT-go:FACT) or 2SG WESTWARDS imperative (§21.4.2.1, IMP:WEST-go).

24542 In addition to its infixability, the autive prefix has the particularity of being
 24543 (optionally) realized as geminated *-n-* when it occurs before a verb stem or verb
 24544 prefix in *nui-*, as in (8).

- 24545 (8) *ty-tciu* *nunui, kui, nunutcu kuni pji-n-nui-rga*
 INDEF.POSS-son DEM ERG DEM:LOC also IFR:IPFV-AUTO-APPL-like
 24546 *cti.*
 be.AFF:FACT
 24547 ‘Even like that, the boy still loved her.’ (140510 sanpian sheye-zh, 121)

24548 19.1.3 Autobenefactive/self-affectedness function

24549 The autobenefactive function of the *nui-* prefix can be subdivided into four sub-
 24550 cases: subject affectedness, beneficial, exclusive beneficial, and mild imperative.

24551 First, the autative prefix frequently appears with transitive verbs when the object
 24552 takes a possessive prefix coreferent with the transitive subject, especially in the
 24553 case of body parts and other inalienably possessed nouns, to emphasize the fact
 24554 that the agent is affected by his/her own action. For example, in (9), the 2SG
 24555 possessive prefix on the body part *nr-ku* is coreferent with the subject of the
 24556 2SG→3 imperative form *pua-nui-χtci*.

- 24557 (9) *nr-ku pua-nui-χtci*
 24558 2SG.POSS-head IMP-AUTO-wash
 ‘Wash your head.’ (elicited)

24559 The autative is not restricted to body part objects, but also appears with more
 24560 abstract possessed objects such as *w-sroβ* and *w-βrum* in (10) and (11).

- 24561 (10) *wzo kuu w-sroβ ko-nui-ri pua-ηu*
 3SG ERG 3SG.POSS-life IFR-AUTO-save SENS-be
 24562 ‘He saved his own life.’ (140512 yufu yu mogui-zh, 127)
- 24563 (11) *tua-ci w-ηgwu w-βrum pjui-kui-ntc^hyr nui*
 INDEF.POSS-water 3SG.POSS-in 3SG.POSS-shade IPFV-SBJ:PCP-shine DEM
 24564 *pjui-nui-mto tce,*
 IFR-AUTO-see LNK
 24565 ‘She saw her (own) reflection in the water.’ (140428 mu e guniang-zh, 59)

24566 Example (12) presents a clear contrast between *mu-to-xtsuy* (no *nui-* prefix) and
 24567 *to-mu-xtsuy* (presence of *nui-* prefix, coreference between possessor and transitive
 24568 subject). It also illustrates that the subject affectedness expressed by the autative
 24569 prefix is not necessarily beneficial, but can also be detrimental.

- 24570 (12) *turpa ci to-lyt ri si nui w-taβ mu-to-xtsuy kuu wzo*
 axe once IFR-release LNK tree DEM 3SG.POSS-on NEG-IFR-hit ERG 3SG
 24571 *yuu w-jab zo to-nui-xtsuy.*
 GEN 3SG.POSS-hand EMPH IFR-AUTO-hit
 24572 ‘He swung the axe but did not hit the tree, and instead hit his own arm.’
 24573 (140430 jin e-zh, 41)

24574 However, the *nu-* prefix is optional in all four sentences: its presence
 24575 is not required to express subject-object possessor coreference. In addition, non-
 24576 coreference between subject and object possessor is possible on verbs taking the
 24577 autive prefix.

24578 Second, the autive prefix can also be found on both intransitive and transitive
 24579 verbs to focus on the pleasant character of an action for the subject, as in (13).

- 24580 (13) *k̥ytsa ra χsum nuu kuu-scu~scit zo*
 24581 COLL:family PL three DEM SBJ:PCP-EMPH~be.happy EMPH
ku-nuu-ryzi-nuu pjy-ηu,
 24582 IPFV-AUTO-stay-PL IFR.IPFV-be
 ‘The three of them lived happily’ (Gesar 2003, 211)

24583 Third, the autive *nu-* can be used to express that the action only benefits the
 24584 subject, to the exclusion of other referents. In (14) for instance, the *nu-* prefix on
 24585 the verbs *tu-nu-ndza-ndzi* ‘they eat it’ and *ku-nuu-ts^{hi}-ndzi* ‘they drink it’ express
 24586 that the 3DU subject (the two elder sisters) performed these actions without shar-
 24587 ing anything with the 1SG referent.

- 24588 (14) *n̥-pi ni ku [...] qajyi nura kuu-muum zyni*
 24589 2SG.POSS-elder.sibling DU ERG bread DEM:PL SBJ:PCP-tasty 3DU
tu-nuu-ndza-ndzi, uu-rkuu ky-kuu-cke ra azo
 24590 IPFV-AUTO-eat-DU 3SG.POSS-side AOR-SBJ:PCP-burn PL 1SG
pú-wy-mbi-a-ndzi, c^ha ra zyni ku-nuu-ts^{hi}-ndzi, azo
 24591 AOR-INV-give-1SG-DU alcohol PL 3DU IPFV-AUTO-drink-DU 1SG
uu-bjø pú-wy-jts^{hi}-a-ndzi puu-cti
 24592 3SG.POSS-diluted AOR-INV-give.to.drink-1SG-DU PST.IPFV-be.AFF
 24593 ‘Your two sisters (...) ate the tasty food and gave me the burned part of
 24594 the bread, drank the alcohol and gave me diluted alcohol to drink.’ (The
 three sisters, 68)

24595 In these cases an emphatic pronoun referring to the beneficiary can be placed
 24596 just before the verb (§6.4). It does not bear the genitive (§8.2.3.2) or the ergative
 24597 even when it refers to the transitive subject, as *zyni* ‘3DU’ in example (14). The
 24598 distributive pronoun *zaka* ‘each his own’ (§6.7.3) can also be used in this function,
 24599 as in (15).

19 Other verbal derivations

- 24600 (15) *tcizo bnuaz ma maje-tci tce, zaka ky-nui-βzu*
 1DU two apart.from not.exist:SENS-1DU LNK each INF-AUTO-do
 24601 *my-rtaβ-tci*
 NEG-be.enough:FACT-1DU
 24602 ‘We are only two, we are not enough people to act separately.’ (The three
 24603 sisters, 74)

24604 The autive can also appear when the beneficiary is an oblique referent, for in-
 24605 stance the genitively-marked *azuy* ‘1SG:GEN’ (§8.2.3.2) in (16), where the relative
 24606 (between square brackets) containing the complement clause *azuy a-pui-nui-pe*
 24607 ‘May it be beneficial to me! (at the expense of others)’ is used to translate 很自
 24608 私 <hěn zìsī> ‘very selfish’ in the original text.

- 24609 (16) [“*azuy a-pui-nui-pe*” *pui-kui-suso*] *ci pjy-ŋu*
 3SG:GEN IRR-IPFV-AUTO-be.good IPFV-SBJ:PCP-think INDEF IFR.IPFV-be
 24610 ‘He was someone who was (always) thinking ‘May it be beneficial to me!’”
 24611 (140430 jin e-zh, 31)

24612 Fourth, with Imperative and Irrealis forms (§21.4), the autive prefix can convey
 24613 a softened tone, expressing a friendly suggestion rather than an order, as in (18)
 24614 and (17) or even the wish that the addressee performs an action pleasant and
 24615 beneficial to him/herself (19).

- 24616 (17) *nyzo numutcu kyndza kui-mum c-ty-nui-ndze*
 2SG DEM:LOC food SBJ:PCP-be.tasty TRAL-IMP-AUTO-eat[III]
 24617 ‘Go and eat nice food there!’ (140426 jiagou he lang-zh, 64)

- 24618 (18) *laxtch'a mutch'umuruz tu, myzui koxtcinri tu tce,*
 things all.kind exist:FACT also silk.thread exist:FACT LNK
 24619 *yui-ty-nui-χtui-nui*
 CISL-IMP-AUTO-buy-PL
 24620 ‘There are all kinds of things, there are silk threads, come and buy them!’
 24621 (140504 baixue gongzhu-zh, 121-122)

- 24622 (19) *a-wui a-wi ra kutcu*
 1SG.POSS-grandfather 1SG.POSS-grandmother PL DEM.PROX:LOC
 24623 *nui-n-nybab-nui, a-nui-tui-nui-rumani-nui, tce*
 IMP-AUTO-have.a.good.time-PL IRR-PFV-2-AUTO-recite.mantra-PL LNK

- 24624 *kutcu* *a-ky-tui-nui-ryzi-nui*
 DEM.PROX:LOC IRR-PFV-2-AUTO-stay-PL
 24625 ‘Grandfathers and grandmothers, have a good time here, recite mantras
 24626 and stay here (pleasantly).’ (2003kandzwsqhaj, 61)

24627 However, it should be pointed out that the autive has an almost opposite
 24628 (mocking/defiance) function in imperatives in examples such as (31) below in
 24629 §19.1.4.

24630 19.1.4 Spontaneous function

24631 The spontaneous function of the autive prefix includes six subcases: actions with-
 24632 out external cause, self-volitional actions, non-volitional actions, casual action,
 24633 concessive clauses, and mocking imperatives.

24634 First, the autive prefix expresses actions that are perceived by the speaker as
 24635 occurring spontaneously by themselves, such as the growth of plants or animals
 24636 (20) or action taking place due to an unseen force (example 21, with an emphatic
 24637 pronoun *uzo*, §6.4).

- 24638 (20) *tce zruuy nui tce, tsuku kui tui-pyc^ha_K* *u-ŋguu*
 LNK louse DEM LNK some ERG INDEF.POSS-navel 3SG-inside
 24639 *tu-nui-łob* *ŋu* *tu-ti-nui* *ŋu* *tce my-xsi*
 IPFV-AUTO-come.out be:FACT IPFV-say-PL be:FACT LNK NEG-GENR:A:know
 24640 *ma uzo nui-kui-nui-βze* *ci* *nui-cti* *tce,*
 LNK 3SG IPFV-SBJ:PCP-AUTO-grow INDEF SENS-be.AFF LNK
 24641 ‘The louse, some say that it comes from the navel, I don’t know, it grows
 24642 by itself.’ (21 mdzadi, 61)

- 24643 (21) *si u-rgym nui yu u-fkaβ* *nui, uzo*
 wood 3SG.POSS-box DEM GEN 3SG.POSS-cover DEM 3SG
 24644 *to-nui-ŋfui.*
 IFR-AUTO-ACAUS:open
 24645 ‘The cover of the box opened by itself.’ (150906 toutao-zh, 180)

24646 Second, with a volitional subject (in particular human), the autive can indicate
 24647 an action performed of one’s own will, without being forced by anything or any-
 24648 one, as in (22), or without help from anybody else (‘by oneself’), as in (23) and
 24649 (24).

19 Other verbal derivations

- 24650 (22) *azō pjui-kui-nui-βde-a-nui* *my-ra,* *azō*
 1SG IPFV:DOWN-2→1-throw-1SG-PL NEG-be.needed:FACT 1SG
- 24651 *pjui-nui-mtsaš-a* *jy*
 NEG-IPFV:DOWN-AUTO-jump-1SG be.allowed:FACT
- 24652 ‘You don’t need to throw me in there, I will jump by myself (of my own
 24653 free will).’ (2011-05-nyima, 152)
- 24654 (23) *azō zo z-pui-nui-ru-a* *nui-nts^{hi}*
 1SG EMPH TRAL-IPFV-AUTO-look-1SG SENS-be.needed
- 24655 ‘I need to go and have a look by myself.’ (140507 tangguowu-zh, 141)
- 24656 (24) *tce nui wzo tu-nui-yyrbaš q^he nui u-kv-ndza*
 LNK DEM 3SG IPFV-AUTO-hunt LNK DEM 3SG.POSS-OBJ:PCP-eat
- 24657 *nui-nui-car* *ŋu.*
 IPFV-AUTO-look.for be:FACT
- 24658 ‘(The cat) hunts on its own and looks for its own food by itself.’ (21-IWLU,
 24659 50)

24660 Third, the autive can also express an action occurring by mistake or against
 24661 the volition of the subject: compare examples (25a) with autive and (25b) without
 24662 it.

- 24663 (25) a. *k^hutsa pui-qru-t-a*
 bowl AOR-break-PST:TR-1SG
 24664 ‘I broke the bowl (possibly on purpose).’ (elicited)
- 24665 b. *k^hutsa pui-nui-qru-t-a*
 bowl AOR-AUTO-break-PST:TR-1SG
 24666 ‘I broke the bowl (by mistake).’ (elicited)

24667 The combination of inferential with autive (see also §21.5.2.3) can express that
 24668 the action occurred against the volition of the subject and unbeknownst to him/
 24669 her at the time when it happened (26).

- 24670 (26) *hehe a-zi ra c^hy-tui-nui-ryrfit-nui*
 INTERJ 1SG.POSS-lady PL IFR-2-AUTO-have.a.child-PL
- 24671 *múaj-tui-nui-suiχsyl-nui*
 NEG:SENS-2-AUTO-realize-PL
 24672 ‘My lady, you had a child and did not notice it.’ (2003 Kunbzang, 118)

24673 Some verbs such as *jmut* ‘forget’ or *cluy* ‘drop’, generally appears with the
 24674 autive prefix in the corpus (in the case of *jmut* ‘forget’ in 23 examples out of 28),
 24675 as in (27)

- 24676 (27) *my-xsi ko, nura jy-nui-jmut-a*
 NEG-GENR:know SFP DEM:PL IFR-AUTO-forget-1SG
 24677 ‘I don’t know, I forgot those things.’ (Conversation, 2013-12-24)

24678 Fourth, an extension of the spontaneous value of the prefix *nui-* is the meaning
 24679 ‘casually’, ‘at one’s will’, ‘whatever’ (corresponding to Chinese 隨便 <suíbiàn>
 24680 ‘casually’), as in (28).

- 24681 (28) “*huaguniang*” *ra tu-nui-ti-nui jui-ŋu.* *nunura zara kui*
 name PL IPFV-AUTO-say-PL SENS-be DEM:PL 3PL ERG
 24682 *wi-rmi tu-nui-tcyt-nui jui-ŋu.*
 3SG.POSS-name IPFV-AUTO-take-PL SENS-be
 24683 ‘They say ‘huaguniang’, they call (this type of cows) like that.’ (*implied*
 24684 *meaning:* they invented their name, it is not a real name; 28 qapar, 239)

24685 Fifth, as a further extension of the meaning ‘casually’ seen above, the autive
 24686 appears in the protasis of alternative (29), scalar (30) and universal (§12.4.3) con-
 24687 cessive conditionals (§25.2.3, Jacques 2014a: 298–300). In these constructions, the
 24688 result described in the apodosis takes place regardless of whether the condition
 24689 in the protasis is fulfilled or not. The autive prefix expresses the fact that the re-
 24690 sulting action is independent of the condition. In this function, it is often realized
 24691 with a gemination as *-nnui-*.

- 24692 (29) *tce tui-sum pui-a<nnui>ri ny ju-kui-ce,*
 LNK GENR.POSS-mind AOR-<AUTO>go[II] LNK IPFV-GENR:S/O-go
 24693 *mw-pui-a<nnui>ri ny ju-kui-ce pui-ra*
 NEG-AOR-<AUTO>go[II] LNK IPFV-GENR:S/O-go PST.IPFV-be.needed
 24694 ‘Whether one liked it or not, one had to go.’ (14 tApi taRi, 212)

- 24695 (30) *nui li wi-qas jui-βze jui-cti ma ui-muanto*
 DEM again 3SG.POSS-foot IPFV-make[III] SENS-be:AFF LNK 3SG.POSS-flower
 24696 *pui-nnui-tu kwny, ui-ryi ra ky-mto mage.*
 PST.IPFV-AUTO-exist also 3SG.POSS-seed PL INF-see not.exist:SENS
 24697 ‘This one also grows by its root, as even if it has flowers, (I) have never
 24698 seen its seeds.’ (17 ndZWnW, 155)

19 Other verbal derivations

24699 Sixth, in the Imperative and the Irrealis, the spontaneous can be used to mock,
24700 or express defiance towards the addressee or another person, stating that all his/
24701 her actions will be in vain, as in (31).²

- 24702 (31) *nyzo nui-nui-yrwu ma, ny-kui-nuiy-mu me*
2SG IMP-AUTO-cry LNK 2SG.POSS-NMLZ:S/A-APPL-be.afraid not.exist:FACT
24703 *ma my-ta-mbi*
LNK NEG-1→2-give:FACT
24704 ‘You can cry as much as you like, nobody is afraid of you, I won’t give
24705 (my daughter) to you (in marriage).’ (2002 qaCpa, 149)

24706 The defying/mockng imperative usage clearly stems from the meaning ‘casu-
24707 ally’ of the autive prefix seen above – in a Chinese translation of (31), the impera-
24708 tive *nui-nui-yrwu* was translated as 隨便他哭 <suíbiàn tā kū> ‘let it cry’ with the
24709 adverb 隨便 <suíbiàn> ‘casually’. In example (32), the verb *ti* ‘say’ appears two
24710 times with the autive prefix, in the second instance with the irrealis, expressing
24711 both defiance and the ‘casually’ meaning at the same time.

- 24712 (32) *qajdo kui tc^{hi} my-nui-ti cti ny, a-ty-nui-ti*
crow ERG what NEG-AUTO-say:FACT be.AFF:FACT SFP IRR-PFV-AUTO-say
24713 *ma ny ciny mab kui,*
LNK be:FACT not.even not.be:FACT SFP
24714 ‘The crow says all kinds of things, let it say (whatever it likes), in any
24715 case none of it is true.’ (28-qAjdoskAt, 27)

24716 19.1.5 Permansive function

24717 In addition to the two previous functions, which are relatively straightforward
24718 for a middle marker, the autive prefix also presents an aspectual function. It ex-
24719 presses the continuity of an action or a state, like the adverb ‘still’ in English.
24720 Two subcases must be distinguished.

24721 First, the autive can mean that the action of the verb goes on despite the oc-
24722 currence of another action which could have been expected to stop it (as in 33
24723 and 34).

²The autive prefix is however also used to express a mild imperative, as in examples (17) and (18) in §19.1.3, depending on the context.

- 24724 (33) *tc^heme nur p^y-nuak^hada ri, muw-pjy-p^hvn, tc^heme nur*
 girl DEM IFR-convince LNK NEG-IFR-be.efficient girl DEM
 24725 *pjy-nuu-yywu cti,*
 IFR.IPFV-AUTO-cry be.AFF:FACT
 24726 ‘She (tried to) comfort the girl, but it was for nothing, the girl kept on
 24727 crying.’ (zrAntCW 2003 48)
- 24728 (34) *nunu pjuu-ηgra cunγgu tce tce nuu-rom*
 DEM IPFV:DOWN-ACAUS:make.fall before LNK LNK IPFV-be.dry
 24729 *cti tce, ui-ryi nunu tcu a-nuu-mp^hur*
 be:AFF:FACT LNK 3SG.POSS-seed DEM LOC PASS-AUTO-wrap:FACT
 24730 *cti*
 be:AFF:FACT
 24731 ‘Before (the flower) falls down, it dries up, and its seed is still wrapped in
 24732 it.’ (13 tCamu, 59)

24733 The autive is found in particular in sentences with the phrase *nuu kunn̥* ‘even
 24734 like that, despite these circumstances’, as in (35) below and (8) in §19.1.2 above.

- 24735 (35) *nur kunn̥ pjy-nuu-ryma.*
 DEM also IFR.IPFV-AUTO-work
 24736 ‘Even so, she kept on working.’ (140520 ye tiane-zh, 397)

24737 Second, the autive *nuu-* prefix can express that a state continues despite the fact
 24738 that a long time has passed, as in (36), or that it is maintained without change,
 24739 as in (37).

- 24740 (36) *txt^ho nunu qartsuμyftcar zo a<nuu>rŋi cti*
 pine DEM winter.and.summer EMPH <AUTO>be.blue:FACT be.AFF:FACT
 24741 ‘The pine (remains) green the whole year.’ (07 tAtho, 51)
- 24742 (37) *zmbulum chondyre gruβgruβ kui-fse t^y-l^{ob} tce*
 type.of.mushroom COMIT Matsutake SBJ:PCP-be.like AOR-come.out LNK
 24743 *χplobχplob kui-pa tce zurtuzyri*
 IDPH(II):spherical SBJ:PCP-auxiliary LNK progressively
 24744 *nuu-kui-nuwyt nuu nuu-ma^h. t^y-l^{ob}*
 IPFV-SBJ:PCP-open.towards.the.exterior DEM SENS-not.be AOR-come.out
 24745 *jyzy ny nuu-xtei la^hma nuu kui-fse nuu-nuu-ηwu~ŋu q^he*
 when SENS-be.small only DEM SBJ:PCP-be.like SENS-AUTO-EMPH-be LNK
 24746 ‘It is not like the (mushroom called) *zmbulum* and the Matsutake, which
 24747 are spherical when they come out and progressively open towards the

24748 exterior. It is just that it is small when it comes out, (otherwise) it is
 24749 already like that.' (24-zwArqhAjmAG, 19)

24750 The permansive reading of the autive prefix is only possible in non-perfective
 24751 verb forms, in particular Factual, Imperfective, Past Imperfective and Sensory.

24752 The permansive use of the autive *nu-* is not without typological parallels. One
 24753 of the clearest cases is the Russian pronominal element *себе*, originally the dative
 24754 form of *себя* 'oneself', and which alongside its autobenefactive value, is used in
 24755 certain contexts with a permansive value ('continue to ...').³

24756 This construction is not fully grammaticalized in Russian, but it is nevertheless
 24757 a good parallel to the permansive value of the autive in Japhug. Since it is clear in
 24758 Russian that the original meaning of this marker can only have been autobene-
 24759 factive, not permansive or spontaneous, this fact suggests that the directionality
 24760 of grammaticalization is more likely to be from autobenefactive to permansive in
 24761 Japhug too. The following pathway in four stages can be proposed to account for
 24762 this evolution; note that all four stages represent attested uses of Japhug autive.

- 24763 1. 'Do X for/to oneself' (AUTOBENEFACTIVE, examples 9, 10, 14 in §19.1.3).
- 24764 2. 'Do X on one's own' (23, §19.1.4).
- 24765 3. 'Do X on one's own, disregarding external conditions' (22, §19.1.4).
- 24766 4. 'Continue to do X, despite (adverse) external factors.' (PERMANSIVE)

24767 19.1.6 Lexicalized autives

24768 The autive *nu-* is lexicalized in a handful of verbs listed in Table 19.1, whose
 24769 meaning is not fully predictable from that of the base verb, and which present
 24770 several morphological properties.

24771 The clearest example of lexicalized autive is the verb *nṛtuy* 'happen to be' (38),
 24772 which derives from *atuy* 'meet'. The autive *nu-* prefix, which undergoes here
 24773 vowel contraction (§12.3), occurs here in spontaneous action function (§19.1.4),
 24774 but both the meaning of the verb and the position of the prefix are anomalous: the
 24775 autive is normally infixated rather than prefixed in the case if verbs in *a-* (§19.1.2).

³I am indebted to Dmitry Nikolayev and Pavel Ozerov for pointing out this fact to me and suggesting the grammaticalization path proposed in this section, though I remain responsible for any error.

Table 19.1: Lexicalized autive verbs

Base verb	Derived verb
<i>atuy</i> ‘meet’	<i>nxtuy</i> ‘happen to be’
<i>βde</i> ‘throw’	<i>nuxβde</i> ‘lose’
<i>ta</i> ‘put’	<i>muta</i> ‘wear, take’
<i>stʰor</i> ‘push, press’	<i>nuustʰor</i> ‘have sex’
<i>kro</i> ‘share’	<i>nukro</i> ‘share among themselves’
<i>sxndu</i> ‘exchange’	<i>antsxndu</i> ‘get exchanged (by mistake)’

24776 (38) *ndi na-za-nuu* *qʰe, tcendi ztu my-kuu-βjxt*
west AOR:WEST:3→3-start-PL LNK west LOC NEG-SBJ:PCP-obtain

24777 *wi-rca* *ntsuu pnu-nxtuy* *pjy-ŋu.*
3SG.POSS-following always IPFV-happen.to.be.at IFR.IPFV-be

24778 ‘When they started (distributing food) from the west, he was each time
24779 among those who did not get anything.’ (28-qAjdoskAt, 157)

24780 The regular infixated autive, with predictable meaning, is also attested as in (39),
24781 in the spontaneous function (§19.1.4).

24782 (39) *nuni zxni nuu-a<nuu>tuy-ndzi*
DEM:DU 3DU AOR-<AUTO>meet-DU

24783 ‘They met each other by themselves (it was not an arranged marriage).’
24784 (14-siblings, 348)

24785 The lexicalized autive *nxtuy* can be prefixed by the sigmatic causative as *znxtuy*
24786 ‘cause X to be at’ as in (40) or with the volitional meaning ‘make sure to happen
24787 to be at’ (41). This is an additional difference from the regular autive, which is
24788 placed further away from the stem than the causative prefix (§19.1.2).

24789 (40) *kuiki kuu-ymtcos numuu uu-mci*
DEM.PROX SBJ:PCP-be.pointy DEM 3SG.POSS-saliva

24790 *pjuu-kuu-yi uu-stu nuu*
IPFV:DOWN-SBJ:PCP-come 3SG.POSS-direction DEM

24791 *púu-wy-z-nxtuy.*
IPFV-CAUS-happen.to.be.at
‘One (turns/puts) the corner (of the bib) towards the direction of the
24792 drooling saliva (of the baby).’ (vid-20140506043657, 19)

19 Other verbal derivations

- 24794 (41) *cyr tut̚s^hot sqamnuz zo tce a-jy-tui-z-nytay tce,*
 night hour twelve EMPH LNK IRR-PFV-2-CAUS-happen.to.be.at LNK
 24795 ‘You will have to make sure to be there at midnight.’ (2003qachga, 26)

24796 The verbs *nufde* ‘lose’ (42), *nuta* ‘wear, take’ (in particular, ‘take as a wife
 24797 in marriage’ as in 43), *nust^hor* ‘have sex’⁴ and *nukro* ‘share among themselves’,
 24798 are additional cases of lexicalized autative derivations. The former *nufde* ‘lose’ re-
 24799 reflects the spontaneous function of the *nu-* prefix, and the three other verbs the
 24800 autobenefactive (‘do for/on oneself’) function.

- 24801 (42) *jy-a<nu>ri ri, u-rte ny-nufde*
 AOR-<VERT>go[II] LNK 3SG.POSS-hat IFR-lose
 24802 ‘He went away, but lost his hat.’ (2010-07-pear story, 21)

- 24803 (43) *nuu kuu u-rzaβ a-ky-nute ny-nunts^hi*
 DEM ERG 3SG.POSS-wife IRR-PFV-take[III] SENS-be.better
 24804 ‘Let him take her as his wife.’ (140513 shenqi de feitan-zh, 183)

24805 The causative forms of these verbs, such as *znuta* ‘let X wear’ (44) and *znukro*
 24806 ‘share X with’ (45) also have the sigmatic causative prefix placed before the lexi-
 24807 calized autative *nu-*, unlike the expected order. Note also that although the mean-
 24808 ing of the autobenefactive *nukro* ‘share among themselves’ from *kro* ‘share’ ap-
 24809 pears to be compositional and predictable, the causative is both positionally and
 24810 semantically irregular, as it works as a beneficiary applicative rather than as a
 24811 true causative with this verb (a prototypical causative would be expected to mean
 24812 ‘made/let X share among themselves’, though it is easy to understand how such
 24813 a meaning could have evolved to ‘share with X’).

- 24814 (44) *ny-rjyntc^ha nura azo ci pjui-kui-z-nuta-a tce*
 2SG.POSS-ornament DEM:PL 1SG INDEF IPFV-2→1-CAUS-take-1SG LNK
 24815 ‘Can you let me wear your ornaments?’ (2014-kWLAG, 472)

- 24816 (45) *u-tyrbačca nura u-zda ra*
 3SG.POSS-wild.meat DEM:PL 3SG.POSS-companion PL
 24817 *nyu-z-nu-krym, nyu-mbi ntsu pŷ-ŋu.*
 IPFV-CAUS-AUTO-share[III]:FACT IPFV-give always IFR.IPFV-be
 24818 ‘He would share the meat from his hunt with the others, give it to them.’
 24819 (150902 hailibu-zh, 6)

⁴This transitive verb requires a male as subject. For a typological parallel, see the obscene sense of Latin *comprimo* ‘press’ (Adams 1990: 182).

24820 The intransitive verb *antsyndu* ‘get exchanged (by mistake)’ is derived from the
 24821 transitive verb *syndu* ‘exchange’ (itself the causative of *andu* ‘be exchanged for’)
 24822 by the combination of the passive *a-* prefix (§18.1) with the prefixal element *-nt-*
 24823 . Given the intrinsic non-volitional meaning of *antsyndu* (see examples 46 and
 24824 47), it is likely that it originates from the autive in spontaneous action function
 24825 (§19.1.4) as the reduced allomorph *-n-*. The *-t-* element between *-n-* and the verb
 24826 stem *syndu* is an effect of internal sandhi *-ns-* → *-nts-* (a sound change reminiscent
 24827 of Tibetan, Li 1933), as prenasalized fricatives do not exist in Japhug (§4.2.1.9).

- 24828 (46) *kʰydi* *snuz-muz nuu-antsyndu*
 lady.seating.place two-kind AOR-be.exchanged.by.mistake
 24829 *my-nu-suχsyl*
 NEG-AUTO-realize:FACT
 24830 ‘(Your king) does not realize that two (different sisters) have been
 24831 exchanged at the lady seating place.’ (2003 Kunbzang, 329; see §15.1.4.4
 24832 on the meaning of *kʰydi*)

- 24833 (47) *nuzora puu-tuu-yntsyndu-nuu*
 2PL SENS-2-be.exchanged.by.mistake-PL
 24834 ‘You are the opposite way!’ (conversation 16-04-12; context: I told
 24835 Tshendzin that my father and I cannot drive cars, while my mother and
 24836 my wife can)

24837 The verb *antsyndu* can thus be analyzed as a double autive+passive derivation,
 24838 with the expected placement of the autive after the passive (§19.1.2). This verb
 24839 can be further causativized as *syntsyndu* ‘exchange by mistake’ and even receive
 24840 a second autive prefix as in (48).

- 24841 (48) *tci-ŋga* *to-nu-su-yntsyndu-tci*
 1DU.POSS-clothes IFR-AUTO-CAUS-exchanged.by.mistake-1DU
 24842 ‘We exchanged our clothes by mistake.’ (elicited)

24843 There are also examples of lexicalized autive *nuu-* prefixes that are located in
 24844 their expected locus in the template, further away from the stem than the causa-
 24845 tive. This is the case for instance with the verb *nusukʰo* ‘rob, extort’ (see example
 24846 15, §17.2.3), from the causative *sukʰo* ‘cause to give’ of *kʰo* ‘give’. This verb has two
 24847 *sy-* antipassive forms (§18.6.2), the regular one *sy-nuu-su-kʰo* (APASS-AUTO-CAUS-
 24848 give) ‘rob people’, but also the variant *nuu-sy-su-kʰo* (AUTO-APASS-CAUS-give) with
 24849 the autive prefix *nuu-* moved further away from the stem than the antipassive *sy-*
 24850 (§18.6.2).

19 Other verbal derivations

Additional possible examples of fossilized autive prefixes include *nungṛt* ‘part ways’ (§18.5.1.2) and *mja* ‘take’ (§19.7.3).

19.1.7 Historical relationship with other derivations

Further semantic evolution of the autive prefix with some verbs has led to the development of distinct grammatical categories, the vertitive *nu-* (§19.2) which remained formally similar to the autive, and the anticausative (§18.5), which underwent phonological reduction to a non-concatenative alternation: the shift from unvoiced stops and affricatives to their corresponding prenasalized voiced counterparts.

19.2 Vertitive

The vertitive *nu-* is exclusively attested with a restricted set of motion (§15.1.2.1) and manipulation verbs (§15.1.2.2), indicated in Table 19.2, expressing that the motion is directed back to the point of origin.

Table 19.2: The vertitive prefix *nu-* in Japhug

Base verb	Derived verb
<i>ce</i> ‘go’	<i>nuce</i> ‘go back’ (home)
<i>yi</i> ‘come’	<i>nuyi</i> ‘come back’ (home)
<i>pʰyo</i> ‘flee’	<i>nupʰyo</i> ‘flee back’ (home)
<i>tsum</i> ‘take away’	<i>nutsum</i> ‘take back’ (home)
<i>yut</i> ‘bring’	<i>nuyut</i> ‘bring back’ (home)
<i>no</i> ‘drive’ (cattle)	<i>nuno</i> ‘drive back’ (home)
<i>zyut</i> ‘arrive’	<i>nuzyut</i> ‘arrive back’ (home)

The vertitive meaning developed out of the autobenefactive function of the autive ‘take for oneself’ → ‘take to one’s home’ → ‘take back home’. However, the two prefixes are synchronically distinct, and can be combined together, as in example (49); note that in this case the autive is generally realized as *-n-* (§19.1.2).

- (49) *tce nur-tu-nym qʰe, tce zara ku-n-nu yi-nu*
LNK IPFV:EAST-2-chase[III] LNK LNK 3PL IPFV:EAST-auto-come.back-PL
ŋu ci c-ku-tu-nym ra?
be:FACT QU IPFV:EAST-2-chase[III]
(And your cows, are they (still) like that), you let them out of the pen (in

24871 the morning), and they come back home on their own, or do you have to
 24872 chase them home?' (taRrdo conversation, 28-29)

24873 All vertitive verbs in Table 19.2 have corresponding homophonous autive forms.
 24874 Example (50) shows the use of the vertitive form of *tsum* 'take away', while (51)
 24875 illustrates its autive form. It is clear in the case of (51) that *nua-tsum* cannot be
 24876 interpreted as 'take back' (since a river flows in one direction and does not take
 24877 back floating objects to its source).

- 24878 (50) *icq^ha rjylpu u-tcuu nua kuu tycime nui, uižo*
 the.mentioned king 3SG.POSS-son DEM ERG girl DEM 3SG
 24879 *ui-rjylk^hβ nautcu jo-nua-tsum q^he*
 3SG.POSS-kingdom DEM:LOC IFR-VERT-take.away LNK
 24880 'The prince took the girl back (*vertitive*) to his kingdom.' (140504 baixue
 24881 gongzhu-zh, 232)
- 24882 (51) *azury nua-nuaβde-t-a nua úa-ŋu tuu-ci kuu*
 1SG:GEN AOR-lose-PST:TR-1SG DEM QU-be:FACT INDEF.POSS-water ERG
 24883 *t^hua-a-nua-tsum nua úa-ŋu*
 AOR-3→3'-AUTO-take.away DEM QU-be:FACT
 24884 'Is it the one that I lost? Is it the one that the water took away
 24885 (*spontaneous*)?' (140427 bianfu jingji he shuiniao-zh, 29)

24886 Unlike the regular autive, but similarly to lexicalized autive verbs (§19.1.6), the
 24887 vertitive prefix is located closer to the verb stem than the causative, as shown by
 24888 the form *znuce* 'let go back' in (52).

- 24889 (52) *tua-yjyn pjua-ta-z-nua-ce jyŋ ri,*
 one-time IPFV:DOWN-1→2-CAUS-VERT-go be.allowed:FACT LNK
 24890 'I can let you go back home one time.' (150901 changfamei-zh, 171)

24891 19.3 Abilitative

24892 The abilitative *sua-/z-* prefix occurs on transitive verb bases. It is formally identical
 24893 to the sigmatic causative, and possibly historically derived from it (§19.3.2). As
 24894 in the case of the causative, the allomorph *z-* is found on polysyllabic verb bases
 24895 whose first syllable has a sonorant initial (§17.2.1.1). Since the abilitative only
 24896 occurs on transitive verbs, there is no equivalent of the *suy-* allomorph (§17.2.1.4).

24897 This prefix derives verbs expressing the ability of the transitive subject to per-
 24898 form the action of the base verb, as in *sundza* 'be able to eat' from *ndza* 'eat'

19 Other verbal derivations

(homophonous with the causative *sundza* ‘make/let eat’, ‘eat with’) in (53) and (54). It seems to be a productive derivation, but abilitative verbs are rare in the corpus, except for the highly frequent verb *znyqqa* ‘be able to endure/resist’ from *mrqqa* ‘bear, endure, resist’.

- (53) *azō kuṇy nū-wy-mbi-a, mu-nui-sui-ndza-j tce tcendyre <dong>*
 1SG also AOR-INV-give-1SG NEG-AOR-ABIL-eat-1PL LNK LNK freeze
ntsui pui-βzu-t-a.
 always AOR-make-PST:TR-1SG
 ‘She gave (some edible ferns) to me, we could not eat (all of it), so I froze it.’ (conversation140510)

- (54) *nui-my-ky-sui-ndza numuu nui-k^ho u-ŋgwi*
 3PL.POSS-NEG-OBJ:PCP-ABIL-eat DEM 3PL.POSS-room 3SG.POSS-in
nutcu u-pui tu-nui-pa-nui jui-ŋgryl,
 DEM:LOC 3SG.POSS-keep(1) IPFV-AUTO-keep(2) SENS-be.usually.the.case
 ‘(The mice gathered food) and would keep in their room (the food) that they are not able to eat.’ (150818 muzhi guniang-zh, 291)

The abilitative can indicate an intrinsic (in)ability (the quantity of food that one can ingest in examples 53 and 54), or a possibility or impossibility due to adverse external circumstances over which the subject has no control, such as the absence of buyers in (55), the shortage of food in (56), or the intellectual difficulty of the problem in (57).

- (55) *syṇymmts^hu kuu ky-ntsye c^hy-yut ri*
 ANTHR ERG OBJ:PCP-sell IFR:DOWNSTREAM-bring LNK
mūj-sui-ntsye ndyre,
 NEG:SENS-ABIL-sell LNK
 ‘Bsod.nams.mtsho brought them (to Mbarkham) to sell, but could not sell it.’ (conversation, 14.05.10)

- (56) *tce li nui-ky-ndza jny-me q^he tce ny li,*
 LNK again 3PL.POSS-OBJ:PCP-eat IFR-not.exist LNK LNK ADD again
ty-rjiti ra my-sui-χsu-ndzi pjy-cti q^he
 INDEF.POSS-child PL NEG-ABIL-feed-DU IFR.IPFV-be.AFF:FACT LNK
 ‘They ran out of food, and were about to be unable to feed the children.’
 (160701 poucet2, 55-56)

- 24924 (57) *tcendyre ui-βlu zaza zo mui-to-sui-tcxt tce*
 LNK 3SG.POSS-trick early EMPH NEG-IFR-ABIL-take.out LNK
 24925 *zuumkhym zo cʰy-rui-suuso pjyr-ra.*
 a.long.time EMPH IFR-APASS-think IFR.IPFV-be.needed
 24926 ‘He could not find a solution at first, and had to think for a long time.’
 24927 (140425 ajimide1, 19)

24928 This derivation can also be used to indicate the acceptance or reluctance of
 24929 the subject to do the action, as in (58).

- 24930 (58) *qajy ui-me nuu kuu, tce li ui-pi nura*
 fish 3SG.POSS-daughter DEM ERG LNK again 3SG.POSS-elder.sibling DEM.PL
 24931 *wuma zo mui-pjy-sui-βde pui-ηu*
 really EMPH NEG-IFR-ABIL-throw SENS-be
 24932 ‘The mermaid was reluctant to abandon her elder sisters.’ (150819
 24933 haidenver-zh, 303)

24934 As shown by examples (53) to (58), abilitative verbs are only attested in nega-
 24935 tive form in the corpus. For some if not most abilitative verbs, the presence of a
 24936 negative prefix is a requirement (§19.3). Non-negative forms can be elicited for
 24937 some of them (59).

- 24938 (59) *a-βlu tx-sui-tca-t-a*
 1SG.POSS-trick AOR-ABIL-take.out-PST:TR-1SG
 24939 ‘I succeeded in finding a solution.’ (elicited)

24940 19.3.1 Lexicalized abilitatives

24941 There are two lexicalized abilitative verbs with the reduced allomorph *s*: *spʰut*
 24942 ‘can cut’⁵ from *pʰut* ‘cut, pluck’, ‘take out’ as in (60) (see also 12, §13.1.3) and the
 24943 complement-taking verb *spa* ‘be able to’ (§24.5.3.4) from *pa* ‘do’. In addition, the
 24944 isolated verb *jqu* ‘be able to lift’ might also be a lexicalized abilitative with an
 24945 irregular allomorph of the prefix (§19.7.8).

- 24946 (60) *mbruutcuu ki müj-mtcoꝝ tce müj-spʰut*
 knife DEM.PROX NEG:SENS-be.sharp LNK NEG:SENS-can.cut
 24947 ‘This knife is not sharp, it cannot cut.’ (elicited)

⁵In Chinese, this verb in negative form is translated as 切不动 <qiēbùdòng> ‘cannot cut’ or 咬不动 <yǎobùdòng> ‘cannot tear by chewing’.

Both *spa* ‘be able to’ and its base verb *pa* ‘do’ have cognates in all Gyalrongic languages, including Tangut (𢂔𢃚⁰³⁸⁵.*wji*^{2,60} ‘be able to’ and 𢂔𢃚⁵¹¹³.*wji*^{1,10} ‘do’, see Jacques 2014c: 86;255–256), Khroskyabs (Wobzifso ‘savoir faire’, Lai 2017: 475) and Stau (*vzə* with metathesis). Although West Gyalrongic languages lack an abilitative derivation, the existence of this cognate set demonstrates that this derivation goes back to at least proto-Gyalrongic, and has been lost in West Gyalrongic except in this lexicalized form.

19.3.2 Historical origin

Although the abilitative derivation goes back at least to the common ancestor of Japhug and Tangut, it is nevertheless likely that it derives from the sigmatic causative (Jacques 2015d: 190).

Although abilitative and causative derivations share little semantic commonalities, there are nevertheless potentially ambiguous sentences, where a *sui-* prefix can be interpreted either as causative or as abilitative with very similar meaning, differing only in perspective. These ambiguous clauses may have been the pivot constructions allowing a reanalysis from causative to abilitative.

The main ambiguous construction between causative and abilitative occurs with the presentive meaning of the sigmatic causative in negative form (§17.2.4.4). For instance, in example (61), the verb *sui-rqoʂ* (from *rqoʂ* ‘hug’) can be analyzed as an abilitative ‘be able to hug’.

- (61) *turme laññulaxsum kuni my-ky-sui-rqoʂ kui-fse*
 people two.or.three also NEG-INF-ABIL-hug SBJ:PCP-be.like
kui-jpum pui-βze cʰa
 SBJ:PCP-be.thick IPFV-grow can:FACT
 ‘(The Fir) can grow so thick that two or three people cannot hug (its trunk).’ (08-tWrgi, 6)

However, it is also possible to construe the meaning in a different way: ‘The fir can grow so thick that it prevents even two or three people from hugging (its trunk)’, with a causative interpretation. This interpretation is possible due to the ambiguity of the scope of the negation of the causative, which generates the preventive meaning ‘prevent, hinder’ in negative forms (§17.2.4.4), from which a modal meaning ‘not able to’ can be derived, with the causee reanalyzed as the transitive subject of the *sui-* prefixed verb. The reanalysis of the causee as transitive subject is made possible in non-finite clauses by the fact that the causer can optionally take the ergative (§14.4.3) and that with the additive focus marker

24981 *kumr* ‘also, even’ the ergative cannot surface anyway (§9.1.6.1), so that the surface
 24982 ambiguity between causee and causer can only be resolved by person indexation.

24983 This hypothesis is made more plausible by the fact that, as discussed above,
 24984 abilitative verbs almost always occur in negative form.

24985 Another potential pivot construction between causative and abilitative is found
 24986 with the instrumental use of the sigmatic causative (§17.2.5.8). In (62) for instance,
 24987 the *su-* prefix is an instrumental causative ('sew with') but the context also in-
 24988 vites an abilitative interpretation ('be able to sew').

- 24989 (62) *kuuki taqaβ ki, ui-xso taqaβ nuu maε, nyrkinu, nufse taqaβ nuu maε tce, nuu rcanu, tc^hi*
 24990 *FILLER like.that needle DEM not.be:FACT LNK DEM UNEXP:FOC what nuu-tui-suso-t c^hui-tui-nuu-su^h-tsuβ k^hui*
 24991 *AOR-2-think-PST:TR IPFV-2-AUTO-CAUS/ABIL-sew be.possible:FACT*
 24992 ‘This needle is no ordinary needle, it is not a simple needle like that,
 24993 (with it) you will be able to sew whatever you like.’ (140508 benling
 24994 gaoqiang de si xiongdi-zh, 103)

24995 19.4 Distributed action

24996 The distributed action derivation has a double morphological exponence, com-
 24997 bining a prefix *ny-* with the partially reduplicated stem of the base verb. Partial
 24998 reduplication applies to the last syllable of the stem if polysyllabic (§4.1), and the
 24999 replicant takes the vowel *-u* by default, except in a few cases studied in §19.4.2.1
 25000 and §19.4.2.2. The distributed action derivation is not compatible with verbs that
 25001 already have reduplicated forms or a *ny-* or *nu-* prefix. For instance, *nuqambum-^bbjom* ‘fly’ lacks a distributed action form; to express this meaning, a serial verb
 25002 construction (§25.4.1.3) with the distributed action derivation *nyce* ‘go around’
 25003 (from the motion verb *ce* ‘go’) is used instead, as in (63).

- 25005 (63) *ui-bar ra ko-ts^hor-nuu tce tcendre, rjylp*u* nuu chony*
 25006 *3SG.POSS-wing PL IFR-attach-PL LNK LNK king DEM COMIT*
 25007 *ayndundyt ju-nuqambumbjom-ndzi tce ju-nyce-ndzi ra*
 25008 *everywhere IPFV-fly-DU LNK IPFV-DISTR:GO-DU PL*
 25009 *to-khui ny-ju.*
 IFR-be.possible SENS-be
 ‘They attached wings on her back, and she became able to fly around
 everywhere with the king.’ (150818 muzhi guniang-zh, 515)

19 Other verbal derivations

This derivation is found with both intransitive and transitive verbs, as shown by the examples in Table 19.3, and does not affect valency. It expresses a repeated action, often (with the base verb has a motional meaning) with aimless motion, distributed spatially and/or temporally. It is semantically very close to the Chinese construction X来X去 *X lái X qù*, and distributed action derivation can often be translated by this construction: for instance *nryjurjuy* ‘run around’ closely corresponds to Chinese 跑来跑去 *pǎo lái pǎo qù*.

The distributed action derivation preserves stem alternation (§12.2.1). The verb *nrytuti* ‘tell around’ has the stem II *-nrytutut* as expected from the base verb *ti* ‘say’ (stem II *-tut*), and *nrycuče* ‘go around’ has the stem II *anryruri* with a prefixed *a-* like the stem II *-ari* of the base verb *če* ‘go’.

Table 19.3: Examples of distributed action derivations

Base verb	Derived verb
<i>pke</i> ‘walk’	<i>nrykunyke</i> ‘walk around’
<i>rjuy</i> ‘run’	<i>nryjurjuy</i> ‘run around’
<i>mtsas</i> ‘jump’	<i>nrymtsumtsas</i> ‘jump around’
<i>če</i> ‘go’	<i>nrycuče</i> ‘go around’
<i>çar</i> ‘search’	<i>nrycuçar</i> ‘search around’
<i>ndo</i> ‘take’	<i>nryndundo</i> ‘carry around’
<i>ti</i> ‘say’	<i>nrytuti</i> ‘tell around’ (or ‘say many times’)
<i>çtʰuz</i> ‘turn towards’	<i>nryçtʰuçtʰuz</i> ‘turn in all directions’
<i>ñndu</i> ‘hit’	<i>nryñnduñndu</i> ‘hit repeatedly’
<i>tʰu</i> ‘ask’	<i>nrytʰutʰu</i> ‘ask around’
<i>þji</i> ‘chase’	<i>nryþjuþji</i> ‘chase around’

The distributed action derivation can be semantically very close to the repetition of the verb with the additive linker *nry*, and both often occur in the same contexts. In the case of motion verbs, repetition with alternation between the EASTWARDS and WESTWARDS orientations (§15.1.4.3) has the same ‘goal-less action’ function as the distribution action derivation. For instance, the meaning of example (64) could be expressed with the verb *nryjurjuy* ‘run around’.

- (64) *ko-rjuy nry jny-rjuy zo qʰe,*
 IFR:EAST-run LNK IFR:WEST-run EMPH LNK
 ‘She ran around.’ (150901 changfamei-zh, 112)

However, in the case of allative motion verbs (§15.1.2.1), distributed action derivation and verb repetition can have a different meaning. The former generally expresses the absence of a specific goal as in (65), and often co-occurs with the adverb *aεyndundvrt* ‘everywhere’ (see 63 above). The distributed action verb *nycuice* is only compatible with the unspecified orientation prefixes, and cannot occur with any of the other six orientations (§15.1.3).

- (65) *wzo-suiso ju-nycuice mui-pjy-jy*
 3SG-as.wish IPFV-DISTR:go NEG-IFR.IPFV-be.allowed
 ‘(The nightingale) was not allowed to (fly) around freely.’ (140519
 yeying-zh, 109)

On the contrary, verb repetition with the same orientation prefix (66) (unlike 64) conveys an idea of continuous and lengthy motion in one specific direction, a meaning that would be incompatible with that of the corresponding distributed action verb *nycuice* ‘go around’.

- (66) *tcendyre ny-ce ny ny-ce tce tcendyre, tcendi tce tce,*
 LNK IFR:WEST-go ADD IFR:WEST-go LNK LNK west LNK LNK
tcendi tcendi tce tcendyre mts^hu ci ny-k-xtury-ci.
 west west LNK LNK lake INDEF IFR-PEG-meet-PEG
 ‘He went towards the west (for a long time), very far in the west, and
 found a lake.’ (28-smAnmi, 91-92)

With non-motional oriented verbs such as *ct^huz* ‘turn towards’ (§15.1.2.4), the distributed action derivation does not imply translational motion, but expresses the idea of turning one’s aim/look/body part towards all directions, as with the verb *nyct^huct^huz* in (67).

- (67) *wi-cna ra ny-nyct^huct^huz*
 3SG.POSS-nose PL IFR-DISTR:turn.towards LNK FILLER INDEF.POSS-child
ra khri wi-pa ky-ky-sui-ynbab nuu pjy-su^hsyl matci
 PL bed 3SG.POSS-under AOR-OBJ:PCP-CAUS-hide DEM IFR-discover LNK
wi-di pjy-mnym tce,
 3SG.POSS-smell IFR.IPFV-have.a.smell LNK
 ‘(The ogre) pointed his nose in all directions, and discovered the children
 that had been hidden under the bed because of the smell.’ (160704
 poucet4-v2, 4-5)

19 Other verbal derivations

With verbs of speech such as *ti* ‘say’ and *t^hu* ‘ask’, the distributed action derivation (respectively *nxtuti* ‘tell around’ and *nxt^hut^hu* ‘ask around’) generally implies a repeated activity (generally at different places) directed towards many people as in (68) and (69). These verbs can select dative recipients as their base verbs (§14.4.1), but those are rarely overt and if overt only generic nouns such as *turme* ‘people’ are possible.

- (68) *nx-smuylm nui azo a-rpyo yui-thui-lxt*
 2SG.POSS-prayer DEM 1SG 1SG.POSS-lap CISL-AOR:DOWNSTREAM-release
tce, tce mucin mx-nxtuti-a ma, nui maw q^he,
 LNK LNK at.all NEG-DISTR:say:FACT-1SG LNK DEM not.be:FACT LNK
tu-nxtuti-a nyu
 TRAL-DISTR:say-1SG be:FACT
 ‘(When the time will come to choose your husband), put your offering
 (prayer) on my lap, and I will not say anything to anybody, otherwise I
 will tell everybody (about it).’ (2005 Kunbzang, 119)

- (69) *tcendyre zuu~zimk^hym zo abyndundyt zo jny-nxt^hut^hu tce*
 LNK EMPH~long.time EMPH eveywhere EMPH IFR-DISTR:ask LNK
“qala nyoy nui-ari” ntsuu to-ti pjy-nxt^hut^hu tce,
 rabbit where AOR:WEST-go[II] always IFR-say IFR-DISTR:ask LNK
 ‘(The bear) asked around everywhere for a very long time where the
 rabbit had gone.’ (2011-13-qala, 21-22)

However, *nxtuti* can also have a temporally protracted action meaning ‘speak for an (overly) long time’ without the implication of more than one recipient, as in (70), a sentence describing the plight of an informant assailed with questions by a linguist.

- (70) *ky-nxtuti kuu a-rqo zo*
 IFR-DISTR:say ERG 1SG.POSS-throat EMPH
ky-nur-suay-ndzi-t-a
 AOR-AUTO-CAUS-be.hoarse-PST:TR-1SG
 ‘My voice has become hoarse (I have made my voiced become hoarse)
 because of speaking again and again.’ (elicited)

With the verb *ts^hyt* ‘try’, the distributed action derivation *nxts^huts^hyt* ‘test/try again and again’ expresses repetition, as in (71) with first syllable reduplication indicating iterative coincidence (§12.4.1.3).

- 25083 (71) *tcendyre tc^heeme nu c-to-nxts^huts^hyt ri, tur-ta-nyts^huts^hyt*
 LNK girl DEM TRAL-IFR-DISTR:try LNK ITER~AOR:3→3'-DISTR:try
 25084 *zo nu tc^heeme nu kui labnylab zo tu-ste*
 EMPH DEM girl DEM ERG IDPH(III):with.ease EMPH IPFV-do.like[III]
 25085 *pui-cti pui-ŋu.*
 PST.IPFV-be.AFF:FACT SENS-be
 25086 'He has gone and tested the girl again and again, and each time he tested
 25087 her, she answered correctly with ease.' (2005tAwakWcqraR, 54)

25088 Stative verbs, including adjectives, are usually incompatible with the distri-
 25089 buted action derivation. The resulting form would be formally identical to the
 25090 tropative (§17.5) with emphatic reduplication (§12.4.3). The only adjective with
 25091 such a derivation is *snu* 'be mad' (from *sm'o* 'be crazy'), which yields *nysnuusnu*
 25092 'be a little crazy, do crazy things (intermittently)', attested in (72).⁶

- 25093 (72) *pjuu-nysnuusnu ntsuu pjy-cti tce*
 IPFV-DISTR:be.mad always IFR.IPFV-be.AFF:FACT LNK
 25094 'He always did (all sorts of) crazy things.' (150829 jidian-zh, 12)

25095 The distributed action derivation also has the sense of 'do X in disorderly fa-
 25096 shion': the form *nysufse* (from the simulative verb *fse* 'be like') can be interpreted
 25097 as 'act foolishly', as in (73). From this use, *nysufse* has developed the extended
 25098 meaning 'be pretentious', like that of the auto-evaluative derivation (§19.5).

- 25099 (73) *tc^hi pui-tui-nyme ŋu, tc^hi pui-tui-nysufse pui-ŋu ma,*
 what SENS-2-make[II] be:FACT what SENS-2-DISTR:be.like SENS-be LNK
 25100 *n̩ki jy-p^hyo ma*
 FILLER IMP-flee LNK
 25101 'What are you doing, what kind of foolish act are you doing, flee!'
 25102 (Norbzang 2012, 65)

25103 In addition to regular distributed action verbs, there is one example with the
 25104 prefix *ry-*: *ryβzuβzar* 'cut into many pieces' from *βzar* 'cut'.

⁶In this translated example, the form *pjuu-nysnuusnu* corresponds to Chinese 瘋瘋癲癲 <fēngfēngdiāndiān> 'a little mad' in the original. However, it seems that the derivation turns the stative verb into a dynamic one.

25105 19.4.1 Lexicalized distributed action verbs

25106 A certain number of verbs have forms that are similar to a distributed action
 25107 derivation, combining a *nr-* prefix with partial reduplication of the stem, but
 25108 have no corresponding base verb with exactly the same stem. The intransitive
 25109 *nryrura* ‘look around’ is a particularly good candidate to be analyzed as a fos-
 25110 silized derivation of this type, as its meaning exactly fits that of a distributed
 25111 action form of a verb meaning ‘look’. It might be an irregular derivation from *ru*
 25112 ‘look at’ (§15.1.2.4), with unexplained vowel alternation (note that the expected
 25113 *†nryruru* does not exist).⁷

25114 The transitive verbs *nyk^huk^hrut* ‘drag along’, *nryeući* ‘drag along’ and *nrymuma*
 25115 ‘stroke’⁸ are possible candidates for being analyzed as lexicalized distributed ac-
 25116 tion verbs. The verb *nryeući* might be related to *ryei* ‘pull’, but for the other two
 25117 no known root exist in the language, and if verbs such as **k^hrut* and **ma* did exist
 25118 at an earlier stage, they have been lost at least in the Kamnyu dialect. Note how-
 25119 ever that *nryeući* and *nyk^huk^hrut* ‘drag along’ are orientable manipulation verbs
 25120 (§15.1.2.2), and express an action occurring in one specific direction, as in (74); if
 25121 these verbs are indeed ancient distributed action derivations, this derivation pos-
 25122 sibly has the sense of ‘protracted action’ (as in 70 above) rather than distributed
 25123 action in the proper sense.

- 25124 (74) *tce ki a-txpi ki lu-nyk^huk^hrut-a tce azo*
 LNK DEM.PROX 1SG.POSS-staff DEM.PROX IPFV:UPSTREAM-drag-1SG LNK 1SG
 25125 *lu-mryku-a nyu tce, a-q^hu*
 IPFV:UPSTREAM-be.first-1SG be:FACT LNK 1SG.POSS-after
 25126 *ly-yi je tce, a-txpi ui-jru~jrob*
 IMP:UPSTREAM-come SFP LNK 1SG.POSS-staff 3SG.POSS-trace~PERLATIVE
 25127 *zo ly-yi je tce,*
 EMPH IMP:UPSTREAM-come SFP LNK
 25128 ‘I am going up there first, dragging this staff_i (of mine) along, come after
 25129 me and follow its_i trace.’ (2005 Kunbzang, 200-201)

25130 On the other hand *nrymuma* ‘stroke’ is used to express touching or groping (eg,
 25131 in the dark) without specific direction, as in (75).

⁷Khroskyabs and Western Gyalrongic in general have -a reduplication (Lai 2013), but since proto-Gyalrong *-a is fronted in Khroskyabs, this Japhug pattern cannot be directly cognate.

⁸The verb *nrymuma* ‘stroke’ is homophonous with the emphatic reduplicated form of the transitive verb *nryma* ‘do, work’.

- 25132 (75) *wi-mat nuw juu-rko tce nū-wy-nymuma tce*
 3SG.POSS-fruit DEM SENS-be.hard LNK IPFV-INV-stroke LNK
 25133 *r̥om.*
 be.rough:FACT
 25134 ‘Its fruit is hard and rough to the touch.’ (12-ndZiNgri, 44)

25135 The intransitive verb *nyp^hup^huu* ‘beg’ could superficially seem to be a lexical-
 25136 ized distributed action verb, but it is better to analyze it as a denominal verb
 25137 (§20.7) from the inalienable noun *wi-p^hup^huu* ‘alms’, which selects the person re-
 25138 ceiving the alms (rather than the one giving them) as possessor, as shown by (76)
 25139 (see also §5.1.2.13).

- 25140 (76) *nyzo ny-p^hup^huu ky-yuat aj a-ya ku-me*
 2SG 2SG.POSS-alms INF-bring 1SG 1SG.POSS-free.time PRS-not.exist
 25141 ‘I don’t have time to give you alms.’ (2003kandZislama, 154)

25142 The verb *nystustu* ‘cause trouble to’ (77) is formally the distributed action
 25143 derivation from the verb of simulative *stu* ‘do like’ (§14.4.2), with a synchronically
 25144 unpredictable meaning.

- 25145 (77) *zara-stusti tce nuu-kui-nystustu maye,*
 3PL-alone LNK 3PL.POSS-SBJ:PCP-cause.trouble not.exist:SENS
 25146 ‘When alone (without their young ones), (the wild yaks) have no enemies
 25147 (predators).’ (20-RmbroN, 50)

25148 19.4.2 Irregular partial reduplication

25149 Partial reduplication with *Cuu-* replicant (§4.1) is not the only way of forming
 25150 distributed action verbs. Suffixal reduplication in *-IV* (§19.4.2.1) and prefixal redu-
 25151 plication in *Coꝝ-* and *Cum-* (§19.4.2.2) are also attested.

25152 19.4.2.1 Replicant in *-IV*

25153 The verbs in Table 19.4 take a suffixed syllable *-le* or *-lu* (*nyymyo* ‘watch’ → *ny-
 25154 myno-le*), or a syllable in *-IV* whose rhyme replicates that of the verb stem (*mbyaꝝ*
 25155 ‘turn over’ → *ny-mbyaꝝ-lax*). This exceptional example of rhyme reduplication in
 25156 Japhug has important consequences for phonological analysis (§3.5.2.1). A similar
 25157 type of reduplication is observed in pattern IV ideophones (§10.1.2.4).

25158 Apart from *car* ‘search’, which has two alternative distributed action deriva-
 25159 tions *nyçuucar* and *nyçarlar* (both ‘search around, search in all directions’), the

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²⁵¹⁶⁰ other verbs only occur with *-IV* replicant variant. The verb *mtçur* ‘turn’ has two
²⁵¹⁶¹ variants *nṛmtçurlur* and *nṛmtçurlu*.

Table 19.4: Examples of distributed action derivations with *-IV* replicant

Base verb	Derived verb
<i>mbyar</i> ‘turn over’ (vi)	<i>nṛmbyarlař</i> ‘turn over here and there’ (vi)
<i>ndzqəβ</i> ‘fall/roll’	<i>nṛndzqəblař</i> ‘roll again and again’ (or in all directions)
<i>ndzaz</i> ‘swim’	<i>nṛndzazlař</i> ‘swim around’
<i>mtçur</i> ‘turn’ (vi)	<i>nṛmtçurlur</i> ‘turn in all directions’ (vi)
<i>nṛmpo</i> ‘watch’ (vl)	<i>nṛmpole</i> ‘watch the scenery’ (vi)
<i>tṣař</i> ‘cause to fall/roll’	<i>nṛntṣařlař</i> ‘cause to roll in all directions’
<i>pyaz</i> ‘turn over’ (vt)	<i>nṛpyazlař</i> ‘turn over here and there’ (vt)
<i>çar</i> ‘search’	<i>nṛçarlar</i> ‘search around’

²⁵¹⁶² With the labile verb *nṛmpo* ‘watch’, this derivation has an antipassivizing effect, since the derived verb *nṛmpole* ‘watch the scenery’ is strictly intransitive.

²⁵¹⁶⁴ This derivation can be applied to both the base verbs *tṣař* ‘cause to fall/roll’ and ²⁵¹⁶⁵ *pyaz* ‘turn over’ and their anticausatives *ndzqəβ* ‘fall/roll’ and *mbyar* ‘turn over’, respectively.

19.4.2.2 Replicant in *Cox-* or *Cum-*

²⁵¹⁶⁸ A handful distributed action verbs take a replicant other than the regular *-u*. The
²⁵¹⁶⁹ transitive verb *mpʰur* ‘wrap’ yields *nṛmpʰosmpʰur* ‘preserve (something fragile)
²⁵¹⁷⁰ by wrapping under several layers’ with *-Cox-* reduplicant (this rare type of reduplication
²⁵¹⁷¹ is also attested in some passive forms, §18.1.5).

²⁵¹⁷² The intransitive verb *nṛvaz* ‘have a good time’ has the derived form *nṛvavtvař*
²⁵¹⁷³ ‘play around’ with *-Cum-* replicant, the only example of this type of reduplication
²⁵¹⁷⁴ in Japhug.

19.4.3 Compatibilities with other derivations

²⁵¹⁷⁶ The distributed action derivation is not attested on verbs with prefixal derivations, including the sigmatic causative. However, the *-IV* variant (§19.4.2.1) is
²⁵¹⁷⁷ found with a handful of anticausativized verbs (§18.5.6).

25179 Further derivations on distributed action verbs are verb rare. The verb *nymnole*
 25180 ‘watch the scenery’ for instance can be causativized with the sigmatic prefix *z-*,
 25181 as in (78).

- 25182 (78) *kyn̩tcʰab̩ ra cʰy-z-nymnole*
 street PL IFR-CAUS-DISTR:watch
 25183 ‘He (took) him to do sightseeing in the city.’ (140511 alading-zh, 53)

25184 19.5 Auto-evaluative

25185 Like the distributed action derivation (§19.4), the auto-evaluative derivation has
 25186 a double exponence: the prefix *zny-* and verb stem partial reduplication. It takes a
 25187 stative intransitive verb as input, and derives an intransitive verb meaning ‘think
 25188 of oneself as *X*, pretend to be *X*’ (where *X* stands for the meaning of the base verb,
 25189 always expressing a positive characteristic), as in Table 19.5. Although similar to
 25190 reflexivized tropatives (§17.5), auto-evaluative verbs have a derogatory meaning
 25191 and imply pretentiousness and vanity or bragging.

25192 When the base verb already has an auto-evaluative meaning (*xpa* ‘be proud’),
 25193 the auto-evaluative derivation only adds the derogatory nuance (*znyxpuχpa* ‘be
 25194 arrogant’).

Table 19.5: Examples of auto-evaluative derivations

Base verb	Derived verb
<i>mpçxr</i> ‘be beautiful’	<i>znxmpçumpcxr</i> ‘think of oneself as beautiful’
<i>χeu</i> ‘be strong’	<i>znyχeuχeu</i> ‘think of oneself as strong’
<i>xpa</i> ‘be proud’	<i>znyxpuχpa</i> ‘be arrogant’
<i>pe</i> ‘be good’	<i>znyjpujpe</i> ‘be full of oneself’

25195 The verb *znyjpujpe* ‘be full of oneself’ (from *pe* ‘be good’) has an irregular
 25196 form with an inserted *-j-* element (the expected form would be *znyjpupe*), and
 25197 its meaning is slightly lexicalized ‘be full of oneself’ (from ‘think of oneself as
 25198 good’).

- 25199 (79) *nw-rjylpu nw kui nura, maka, uzo t̩-ky-fst̩t yu*
 3PL.POSS-king DEM ERG DEM:PL at.all 3SG AOR-OBJ:PCP-flatter GEN
 25200 *ui-rju nura pjx-mtsʰym tce, myzui zo*
 3SG.POSS-word DEM:PL IFR-hear LNK even.more EMPH

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25201 *to-znyjpujpe.*

IFR-be.full.of.oneself

25202 ‘Hearing these words of praise, the king became even more full of himself than before.’ (150830 afanti-zh, 98-99)

25204 Other examples of lexicalized auto-evaluative verbs include *znyhluli* ‘play the coquette’ (from *li* ‘be spoiled’) and *znyjyuju* ‘be arrogant’, a verb built from the root of the copula *yu* ‘be’, whose original meaning was ‘be right’ (§16.1.1.7).

25207 19.6 Attenuative reduplication

25208 In verbal derivation, reduplication occurs to express reciprocal (§18.4.1), distributed action (§19.4) and emphasis (§12.4.3). Combination of *a-* prefix with partial 25209 reduplication of the last syllable of the stem is also found with an attenuative 25210 meaning in a few stative verbs of colour (Table 19.6). Note that the replicated syllables 25211 takes the vowel /y/ instead of /u/ in *a-yr~yrum* ‘be whitish’ and *a-pr~pyi* 25212 ‘be greyish’, and the absence of *w* in *a-yr~yrum* (on the cluster *wxt-*, see §4.2.1.1).

Table 19.6: Examples of attenuative reduplication

Base verb	Attenuative
<i>wyrum</i> ‘be white’	<i>ayryryrum</i> ‘be whitish’
<i>pyi</i> ‘be grey’	<i>apryypyi, apypyi</i> ‘be greyish’
<i>qarje</i> ‘be yellow’	<i>aqarjyurje</i> ‘be yellowish’

25214 Since the base verbs in Table 19.6 can also be subjected to emphatic reduplication, we find minimal pairs like and *a-yrr~yrum* ‘be whitish’ and *a-qarju~rje* 25215 ‘be yellowish’ (80) vs. *wyrum~wyrum* ‘be very white’ (81) and *qarju~rje* ‘be very 25216 yellow’ (82), respectively (§12.4.3).

25218 (80) *wi-muntoz nura ayryryrum wi-ŋguwz kurny*
3SG.POSS-flower DEM:PL be.whitish:FACT 3SG.POSS-inside:LOC also

25219 *aqarjyurje kur-fse*

be.yellowish:FACT SBJ:PCP-be.like

25220 ‘Its flower is whitish, with a taint of yellowish.’ (‘it is like yellowish inside 25221 the whitish colour’) (16-CWrNgo, 207)

- 25222 (81) *tceri qro numu wuma zo wyrum, kui-wyrur~wyrum*
 LNK pigeon DEM really EMPH be.white:FACT SBJ:PCP-EMPH~be.white
 25223 *zo ηu.*
 EMPH be:FACT
 25224 ‘The pigeon is very white.’ (24-qro, 2)
- 25225 (82) *wi-munto& rca wuma zo mpcyr tce*
 3SG.POSS-flower UNEXP:FOC really EMPH be.beautiful:FACT LNK
 25226 *kui-qarŋu~rŋe zo ηu.*
 SBJ:PCP-EMPH~be.yellow EMPH be:FACT
 25227 ‘Its flower is very beautiful, it is very yellow.’

25228 19.7 Fossil affixes and marginal derivations

25229 19.7.1 Volitional *mu-* prefix

25230 The intransitive dynamic verb *munmu* ‘move’ contains a prefix *mu-*, as shown
 25231 by the existence of the bare root *nmu* in the verb *nmu* ‘shake (of earthquakes)’
 25232 ([Jacques 2017a](#)), which is only found in collocation with the noun *wajuu* ‘earth-
 25233 quake’ (83).

- 25234 (83) *wajuu jny-nmu*
 earthquake IFR-shake
 25235 ‘There was an earthquake.’ (elicited)

25236 The Limbu labile verb |*munt*| ‘move’ ([Michailovsky 2002](#)) is probably cognate
 25237 to the Japhug root ([Jacques 2017b](#): 212, see also §3.3.3 on the absence of coda in
 25238 Japhug), and since *munmu* means ‘move’ in general (for both animate and ina-
 25239 nimate beings), the restriction of the base verb *nmu* to earthquakes specifically
 25240 cannot be an archaism. Rather, the ancestor of the base verb *nmu* must have had
 25241 a more general meaning ‘move’ when the proto-form from which *munmu* orig-
 25242 inates was derived from it. The exact meaning of the ancestor of *nmu*, and the
 25243 function of the *mu-* prefix in this verb are uncertain, but the following scenario
 25244 can be proposed: the *n-* element in *nmu* could be a frozen allomorph of the autive
 25245 (§19.1), and the original meaning of *nmu* could have been ‘move (spontaneously,
 25246 without external agency)’, and the derived form *munmu* would thus have had the
 25247 meaning ‘move (voluntarily)’: in Japhug, this verb can refer to volitional actions,
 25248 and it is used for instance with the imperative and prohibitive (for instance in
 25249 [84](#)).

- 25250 (84) *ma-nu-tu-mummu ma my-pʰvn*
 NEG-IMP-2-move LNK NEG-be.efficient:FACT
 25251 ‘Don’t move, otherwise it won’t work!’ (2002 qala, 69)

25252 In this interpretation, the original function of the *mu-* in this example would
 25253 be deriving a volitional verb out of a non-volitional one (itself rendered non-
 25254 volitional by the autobenefactive prefix).

25255 In other Gyalrong languages, only cognates of the derived verb *munmu* are
 25256 attested. The Bragbar Situ form *vərmô* ‘bouger’ (Zhang 2020) suggests that *mu-*
 25257 originates from *wə- with regressive nasalization from the last syllable. This in-
 25258 invalidates a possible comparison with the volitional *m- prefix reconstructed by
 25259 Baxter & Sagart (2014: 55) in Old Chinese.

25260 19.7.2 Applicative -t suffix

25261 Beside the productive prefixal *nu-* applicative (§17.4), Japhug has vestigial traces
 25262 of a -t applicative suffix, better attested in Kiranti and West Himalayish languages
 25263 (see Michailovsky 1985, Jacques (2015a) and Jacques 2016c for comparative stud-
 25264 ies of this suffix). Only two examples of this derivation exist in Japhug: *yut* ‘bring’
 25265 and *mdut* ‘strongly wish for’.⁹

25266 The verb of manipulation *yut* ‘bring’ derives from the motion verb *yi* ‘come’;
 25267 the vowel alternation is regular as pre-Japhug *i changes to /u/ in closed syl-
 25268 lables. With a motion verb such as ‘come’, the effect of the applicative (85) is
 25269 similar to a causative (86).

- 25270 (85) ‘come with X’ → ‘bring’
 25271 (86) ‘cause X to come’ → ‘bring’

25272 The transitive verb *mdut* ‘be resolved to, be determined to’ is historically re-
 25273 lated to the verb *mduu* ‘live up to’, and constitutes another example of the -t ap-
 25274 plicative, though it is less immediately obvious than in the case of *yut* ‘bring’
 25275 because each of the verbs has undergone semantic specialization after the deriva-
 25276 tion took place.

25277 The verb *mduu* is semi-transitive (§14.2.3), and takes as its semi-object the life-
 25278 span; it can be applied to plants, animals and humans, as shown by examples (87)
 25279 and (88). It selects the DOWNSTREAM series of directional prefixes (§15.1.4.1).

⁹More examples of -t applicative are found in Situ (Lin 2017; Zhang 2020), though all involving verbs of motion.

- 25280 (87) *tce nuŋa uzo nunu, sqamŋu-xpa jamar c^hu-mduu*
 LNK COW 3SG DEM fifteen-year about IPFV-live.up.to
 25281 *juŋ-ŋgryl*
 SENS-be.usually.the.case
 25282 ‘A cow itself can live up to fifteen years.’ (05-qaZo, 142)
- 25283 (88) “*nyzo nu k^hruutsu-xpa a-t^hu-tuu-mduu ra ny*”
 2SG DEM ten.thousand-year IRR-PFV-2-live.up.to be.needed:FACT SFP
 25284 *to-ti juŋ-ŋu. tce azo kuŋy k^hruutsu c^hondyre tuu-rzaŋ*
 IFR-say SENS-be LNK 1SG also ten.thousand-year COMIT one-day
 25285 *nunu c^hu-mduu-a ra to-ti*
 DEM IPFV-live.up.to-1SG be.needed:FACT IFR-say
 25286 ‘He said: ‘May you live ten thousand years! I want to live one thousand
 25287 years and one more day.’ (150830 afanti-zh, 64)

25288 The meaning ‘live until/up to’ is however a semantic innovation in Japhug:
 25289 its Situ cognate *mdš* means ‘reach’ as a motion verb. Japhug has restricted the
 25290 meaning of this verb to a very specific context.

25291 The verb *mdut* ‘be resolved to, be determined to’ is morphologically transitive,
 25292 and can take as its object an infinitive complement as in (89). It shares with *mduu*
 25293 ‘live up to’ the DOWNSTREAM directional prefixes (*c^hu-*).

- 25294 (89) *azō kuruu-skvt kx-βzjox nu c^hu-mdut-a zo*
 1SG Tibetan-language INF-learn DEM IPFV-be.determined EMPH
 25295 *cti*
 be.AFF:FACT
 25296 ‘I am determined to learn Tibetan/Gyalrong.’ (elicited)

25297 The precise meaning of *mdut* is to be determined to do something that one
 25298 has confidence they can realize. If one accepts the idea that the original meaning
 25299 of Japhug *mduu* ‘live up to’ was ‘reach’ as in Situ, the meaning ‘be determined to’
 25300 of the verb *mdut* has the same relationship to that of the base verb as English
 25301 ‘reach for’ (‘reach for the stars’) to the verb ‘reach’, with a conative interpretation
 25302 ‘try/strive to reach’. The addition of the suffix *-t* turns the semi-transitive
 25303 (morphologically intransitive) *mduu* into a transitive verb whose A corresponds
 25304 to the S of the base verb. This applicative derivation from a semi-transitive verb
 25305 is not unique in Japhug; the transitive verb *nurga* ‘like’ from the verb *rga* ‘like,
 25306 be happy’ with the *nu-* applicative is another similar example (§17.4).

19.7.3 Antipassive -t suffix

The semi-transitive verb *βjyt* ‘obtain’, as proposed by Gong (2018: 310), is related to the orientable manipulation verb *mja* ‘take (from)’, a meaning illustrated by example (90). The two verbs differ by vowel alternation, -t suffixation and preninal nasalization.

- (90) *nunura yuu nuu-rte nuu ci ui-q^hu ci zo*
DEM.PL GEN 3PL.POSS-hat DEM one 3SG.POSS-after one EMPH
to-nui-mja. to-nuu-mja q^he jo-tsum q^he
IFR:UP-AUTO-take IFR:UP-AUTO-take LNK IFR-take.away LNK
ui-pi ra tuukaka nuu-ku ui-tas
3SG.POSS-elder.sibling PL each 3PL.POSS-head 3SG.POSS-on
pjy-ta.
IFR:DOWN-put
‘He took their crowns one after the other and put them on the heads of each of his brothers.’ (160705 poucet5-v2, 19-20)

The transitive verb *mja* can also mean ‘get, obtain’ when used with the DOWNWARDS orientation, as in (91) (§15.1.5.6). Apart from Tshobdun *mjē*, cognates in other Gyalrongic languages (such as Zbu *vjé?*) lack a nasal preinitial, suggesting that the Japhug and Tshobdun forms result from fusion with the autive prefix (§19.1, Gong 2018: 310). This constitutes an interesting exclusive common innovation shared by Japhug and Tshobdun.

- (91) *tua-sji ky-mdi tua-kuu-ryma, <gongfen> bnuu-skyrma*
one-day INF-complete IPFV-GENR:S/O-work labour.point two-cent
pjú-wy-mja ma mui-puu-kuu-c^ha,
IPFV-INV-take apart.from NEG-PST.IPFV-GENR:S/O-can
puu-kuu-xtci.
PST.IPFV-GENR:S/O-be.small
‘Working a complete day, I could only get two cents of labour points, as I was young.’ (2010-09, 86)

The verb *βjyt*, meaning ‘obtain’ (something that everyone is looking for) is semi-transitive (§14.2.3), optionally taking a semi-object or a complement clause as in (92) and (93), but conjugated intransitively, as shown by the Aorist *puu-βjyt* (AOR-obtain) ‘he got (it)’ (with a A-type preverb, §14.3.1).

- 25333 (92) *ky-ndza maka mur-pjy-βjyt.*
 INF-eat at.all NEG-IFR:DOWN-obtain
 25334 ‘He did not obtain anything to eat.’ (qajdoskAt 2002, 104)
- 25335 (93) *tx-tcui stu kui-wxti numu kui [numu tc^heme nu*
 INDEF.POSS-son most SBJ:PCP-be.big DEM ERG DEM girl DEM
 25336 *mu-pu-ky-βjyt] nuu wuma zo pjy-ny-syyduy*
 NEG-AOR-INF-obtain DEM really EMPH IFR-TROP-be.unpleasant
 25337 ‘The elder boy was upset that he did not get the girl.’ (140513 shenqi de
 25338 feitan-zh, 219)

25339 The verb *βjyt* ‘obtain’ is not synchronically derived from *mja* ‘take’: both verbs
 25340 come from an etymon reflected by Zbu *vjé?* ‘prendre, obtenir, enlever’ (Gong
 25341 2018: 310) whose expected Japhug form would be **βja*. Based on the comparative
 25342 evidence in Gong (2018: 310–311), this lost verb was transitive and had the same
 25343 argument structure as Japhug *mja*.

25344 Hence, the *-t* suffix in *βjyt* ‘obtain’ used to remove morphological transitivity,
 25345 turning the transitive subject into an intransitive subject, and the and the object
 25346 into an (optional) semi-object. Given the fact that some *-t* codas in Japhug origi-
 25347 nate from earlier *-s (§11.3), it is possible that this *-t* suffix is related to the reflex-
 25348 ive/middle suffix attested in Kiranti, Nungish and West-Himalayish (reflected for
 25349 instance by Khaling *-si*, Jacques et al. 2016), which has antipassive functions in
 25350 many languages, including possibly Old Chinese (Jacques forthcoming).

25351 19.7.4 Other detransitive prefixes

25352 The transitive verb *t^hu* ‘ask’ (with indirective alignment, §14.4.1), in addition to
 25353 the regular antipassives *rvt^hu* ‘ask questions’ and *srt^hu* ‘ask for a girl in marriage’
 25354 (§18.6.7), has two isolated intransitive derived forms: *rvtmut^hu* ‘ask around’ and
 25355 *cumt^hu* ‘ask a lot of questions’ (94), from which the compound *cumt^huspo_K* ‘child
 25356 who likes to ask a lot of question’ is derived (with *spo_K* ‘have a hole’ as second
 25357 element).

- 25358 (94) *nyzo ndyre ny-tui-cumt^hu nu!*
 2SG LNK 2PL.POSS-NMLZ:DEG-ask.a.lot.of.questions SFP
 25359 ‘You really (like to) ask a lot of questions!’ (elicited)

25360 It is possible that the *-m(u)-* element in these complex prefixes is historically
 25361 related to the *amu-* reciprocal and distributed property prefixes (§18.4.2, §18.7).

19.7.5 *ry-* prefix

Some verbs have *ry-* prefixes that can neither be analyzed as antipassive (§18.6.1) nor as denominal (§20.4) derivations, at least synchronically, and whose function is not clearly identifiable.

The verbs *rywum* ‘tidy up’ and *rytsʰyt* ‘try’ are clearly derived from *wum* ‘gather’ and *tsʰyt* ‘try’, respectively. However, they cannot be analyzed as antipassives, since they are morphologically transitive like their base verbs.

The verb *rywum* can mean ‘tidy up’ as in (95), taking as object a place (house or room) or ‘collect (and put in order)’ as in (96).

- (95) *txcime nuu kuu kʰa ku-ryzi tce, nuu-ndz̥ytsʰi ra tu-βze,*
 girl DEM ERG house IPFV-stay LNK 3PL.POSS-food PL IPFV-make[III]
 nuu-kʰa ra tu-rywum p̥jx-ŋu
 3PL.POSS-house PL IPFV-tidy.up IFR.IPFV-be
 (140504 baixuegongzhu-zh, 102)

- (96) *rgytpu nuu kuu nuura rŋual nuu-ky-mbi cʰo laχtcʰa*
 old.man DEM ERG DEM:PL silver AOR-OBJ:PCP-give COMIT thing
 nuu-ky-mbi nuura to-rywum qʰe,
 AOR-OBJ:PCP-give DEM:PL IFR-collect LNK

The old man collected the money and the things that (the people) had given (them).’ (150906 toutao-zh, 174)

These meanings can also be conveyed by the base verb *wum* ‘gather’, as in (97). However, *wum* has a much wider range of meaning, including ‘fold, close’ (of umbrellas, wings, see 92, §15.1.4.3) and ‘take as (disciple)’ (24, §8.1.7). The derived verb *rywum* thus has a more specific and restricted use than its base verb.

- (97) *nuura kuu uŋ-paxci ra ky-wum ta-qur-nuu tce,*
 DEM ERG 3SG.POSS-apple PL INF-gather AOR:3→3'-help-PL LNK
 ‘They helped him to pick up his apples.’ (pear story-Tshendzin, 11)

The meaning difference between *rytsʰyt* ‘try’ and *tsʰyt* ‘try’ is more difficult to ascertain, as both verbs can occur with a nominal object as in (98). In the corpus, when the derived verb *rytsʰyt* has an overt object, it is always however a complement clause, and it can have the sense of ‘compare’ as in (99).

- (98) *uŋzo kuu tui-ŋga ta-rytsʰyt/ta-tsʰyt*
 3SG ERG INDEF.POSS-clothes AOR:3→3'-try
 ‘He tried the clothes.’ (elicited)

- 25390 (99) [a-mbro ur-jme puu-zri ci, nyki, nyzo ny-kyrme
 1PL.POSS-horse 3SG.POSS-tail SENS-be.long QU FILLER 2SG 2SG.POSS-hair
 25391 puu-zri nuu] cui-ryts^hyt-tci ra
 SENS-be.long DEM TRAL-try:FACT-1DU be.needed:FACT
 25392 'Let us try whether my horse's tail is longer, or your hair (let us see which,
 25393 of my horse's tail and your hair, is the longest)' (2003 Kunbzang, 470)

25394 However, the base verb is also possible with exactly the same type of comple-
 25395 ment clauses, as in (100).

- 25396 (100) <chengming> kuu, nunu qarts^hi numui to-ts^hyt. tce pur-c^ha ci
 ANTHR ERG DEM cricket DEM IFR-try LNK SENS-can QU
 25397 māij-c^ha nura to-ts^hyt tce
 NEG:SENS-can DEM:PL IFR-try LNK
 25398 'Chengming tried the cricket, tried whether it would be victorious (in
 25399 cricket fights) or not.' (150904 cuzhi-zh, 142)

25400 The intransitive verb *rÿmpçyr* 'make up' (101) is derived from the stative verb
 25401 *mpçyr* 'be beautiful'.

- 25402 (101) pya t^hamtcyt nuu, [...] pjy-ra-χtci-nuu, nuu-ku ra pjy-sycyt-nuu
 bird all DEM IFR-APASS-wash-PL 3PL.POSS-head PL IFR-comb-PL
 25403 tce to-rÿmpçyr-nuu puu-ju.
 LNK IFR-make.up-PL SENS-be
 25404 'All birds ... washed, combed their hair and dressed up.' (tulao de
 25405 wuya-zh, 15)

25406 It has the emphatic reduplicated form *rÿmpçor~mpçyr* with a rare -*or* repli-
 25407 cated syllable, and often occurs in the causative form *zrÿmpçyr* 'help X making
 25408 up' or 'make up/dress up using', as in (102).

- 25409 (102) tu-kui-z-rÿmpçyr-tci ra
 IPFV-2→1-CAUS-make.up-1DU be.needed:FACT
 25410 'Help us dressing up and making up.' (140504 huiguniang-zh, 71)

25411 This use of the *rÿ-* prefix could be analyzed as a quasi-reflexive 'make oneself
 25412 beautiful', reminiscent of the case of the antipassive *raχtci* 'wash' (vi) (see 101 and
 25413 §18.6.7.5), though it cannot be analyzed as an antipassive or a reflexive since the
 25414 base verb is intransitive.

The transitive verb *r̥yruy* ‘cherish’ comes from the intransitive *ruy* ‘be precious’ with a tropative meaning (‘consider to be precious’, §17.5.5). The derivational prefix here *r̥y-*, with an intrusive velar fricative (on which see §17.2.1.4 and the references therein).

19.7.6 *yuu-/yr-* prefix

A few verbs have *yuu-* or *yr-* prefixes that can neither be analyzed as facilitative *yr-* (§18.9.1), as causative (§17.3), as denominal (§20.5.2) nor as deideophonic derivations (§20.9).

First, the transitive verb *yrtçrt* ‘select from’, more specifically ‘choose/select (someone) from a group of people’ (in particular, as a leader),¹⁰ is derived from *tçrt* ‘take out’. It selects as object the person that is chosen, and also takes an essive adjunct (§8.1.7) describing the office/position of the chosen person. In example (103), the verb *yrtçrt* occurs in a finite relative clause (§23.2.2) whose relativized element is the object. The noun *nu-ŋgumdzuy* ‘their leader’ inside the relative is the essive adjunct.

- (103) *tce nuu <faliedong> numuu, [numuu nuu-ŋgumdzuy*
 LNK DEM ANTHR DEM DEM 3PL.POSS-leader
ta-yrtçrt-nuu] kui <shake> nuu ko-su-βraꝝ.
 AOR:3→3-choose-PL ERG ANTHR DEM IFR-CAUS-attach
 ‘Feridun, the one they had chosen as their leader, had Zohak attached.’
 (140514 xiee de shewang-zh, 107)

Its reflexive form *zryyrtçrt* ‘volunteer’ (to go and go something) has a meaning that is not completely predictable from that of the base verb.

Second, *yvlyt* ‘lock’ is related to *lvt* ‘release’, which can mean ‘lock’ when occurring in collocation with the noun *sycuu* ‘key’ (136, §16.1.3.10, §18.1).

Third, the verb of perception *yuuχsyl* ‘realize’ (§24.5.4.2) originates from *χsyl* ‘be clear’ (itself from དྲୟୁସ୍ ཁୟୁସ୍ ‘clear’), with a quasi-tropative meaning ‘clearly perceive that X’.

It is possible that these three transitive verbs originally were denominal verbs from deverbal nouns such as the bare action nominals (§16.4.6), but there is no evidence for the putative nouns from which these verbs could have been derived.

¹⁰This verb has a Tshobdun cognate *wptfet_{II}* ‘select’ (Sun & Blogros 2019: 209), and this derivation thus goes back at least to their common ancestor.

25444 **19.7.7 *a*- prefix**

25445 In addition to the passive (§18.1), reciprocal (§18.4.1) and denominal stative (§20.2.1)
 25446 derivations, a prefix *a*- has non-classifiable functions in the following examples.

25447 The stative verb *amtçor* ‘be pointy’ appears to be derived from *mtçor* ‘be sharp’.
 25448 Both are stative verbs, and are obviously close semantically (both can take for
 25449 instance *mbrutçuu* ‘knife’ as intransitive subject, as in 60, §19.3.1).

25450 The verb *ac^hyt* ‘have X years of difference’ is either plain intransitive, taking
 25451 the number of years as subject (104), or semi-transitive, selecting the years as
 25452 semi-object (104b) (see also 62, §9.1.3.3).

- 25453 (104) a. *tcizo tci-pyr^hyt* *kumju-pyrme ac^hyt*
 1DU 1DU.POSS-between five-years differ.in.age:FACT
 25454 b. *tcizo kumju-pyrme ac^hyt-tci*
 1DU five-years differ.in.age:FACT-1DU
 25455 ‘We have a five year difference.’ (elicited)

25456 It could potentially be analyzed as a denominal verb in *a*- (§20.2.1) from a lost
 25457 noun **c^hyt* borrowed from Tibetan ཀྚྱତ ‘difference’. While the Tibetan origin
 25458 of the root is beyond doubt, it is also possible that this verb is derived by the *a*-
 25459 prefix from the semi-transitive *c^hyt* ‘differ by’ (itself from Tibetan), which selects
 25460 as semi-object not a characteristic other than age, for example the quantity of
 25461 fern eaten in (105).

- 25462 (105) *kui-dyn* *kui-mpi* *ci* *c^hyt-nuu* *ma nuu*
 SBJ:PCP-be.many SBJ:PCP-be.few INDEF differ:FACT-PL LNK DEM
 25463 *kui-fse* *rcauu* *pakuku* *zo* *kui-dyn* *zo*
 SBJ:PCP-be.like UNEXP:FOC every.year EMPH SBJ:PCP-be.many EMPH
 25464 *nuu-car-nuu*.
 IPFV-search-PL
 25465 ‘They differ in that some (eat fern) a lot or fewer, but they search a lot
 25466 (of fern) every year.’ (conversation 140510)

25467 The verb *c^ha* ‘can’, ‘be able’, ‘be fine’ has two derived forms in *a*-: *ac^huc^ha* ‘be
 25468 capable’ (see 1, §7.1.4) with reduplication *ac^hyla* ‘be capable’ with suffixed *trtlV*
 25469 replicated syllable (§19.4.2.1). The meaning of this derivation is both emphatic
 25470 and antipassive-like: unlike the base verb *c^ha* ‘can’, which can take a comple-
 25471 ment clause as semi-object (§16.2.1.5, §24.2.3.1), *ac^huc^ha* and *ac^hyla* are strictly
 25472 intransitive stative verbs.

25473 19.7.8 Abilitative *j*- prefix

25474 The transitive verb *jqu* ‘be able to lift’ (106) has an intrinsically abilitative meaning.
 25475 This unusual property suggests that it may be the remnant of a lexicalized
 25476 abilitative verb whose base **qu* ‘lift’ was lost, and that the *j*- preinitial was an
 25477 abilitative prefix, possibly an irregular allomorph of the *su-* abilitative (§19.3),
 25478 reminiscent of the *j*- allomorph of the sigmatic causative (§17.2.2.5).

- 25479 (106) *p̥jkl^hu u-**ku* *mr-jqe*
 25480 yet 3SG.POSS-head NEG-be.able.to.lift[III]:FACT
 ‘(The baby) is not yet able to lift up his head.’ (elicited)

25481 19.7.9 Prenasalization

25482 In addition to the anticausative derivation (§18.5), prenasalization alternation is
 25483 found in an isolated pair of intransitive verbs: *sqlum* ‘collapse’ (of the ground)¹¹
 25484 and *arnglum* ‘be caved in’ (107).

- 25485 (107) *u-**t^hob* *jua-**yrnclum*
 25486 3SG.POSS-ground SENS-be.caved.in
 ‘The ground is caved in.’ (elicited)

25487 The form *arnglum* derives from *sqlum* by addition of a prefix *a-* and prenasaliza-
 25488 tion of the uvular stop /q/ to /NG/. In addition, the /s/ was rhotacized to /r/ as
 25489 result of voicing: the combination ZNG is only attested across syllable boundaries
 25490 in Japhug, as in the plant name *razngu*,¹² never in an onset, and this example
 25491 suggest that a sound change *SNG → RNG took place.

25492 The combination of prenasalization with *a-* in *arnglum* appears to have a re-
 25493 sultative stative meaning, as opposed to the dynamic verb *sqlum*. It is possible
 25494 that the prenasalization reflects a trace of the autive prefix (§19.1.4).

25495 19.7.10 Comparative derivation?

25496 The pair of stative verbs *sna* ‘be good, be worthy’ and *mna* ‘be better’ are possi-
 25497 bly historically related, sharing a common root *-na* with different prefixes *s-* and

¹¹The verb *sqlum* can for instance express the collapse of the ground under the weight of an object or person, as in (277) in §21.7.3.2.

¹²In this word, note also that a form such as †*rarngu* would violate another phonotactic constraint (§3.4.1).

25498 *m-* (or **w-*, with nasalization, §17.3.1, §4.2.1.9) prefixes. If genuine, this etymological
 25499 relationship is not synchronically obvious, and a detailed description of the
 25500 synchronic meanings of these verbs is necessary.

25501 The verb *sna* can either mean ‘be kind, be generous’ as in (108) (see also 9,
 25502 §14.2.3), ‘be pleasant’ (example 112, §17.4.3) or ‘be worthy, be fit to’, as in (109)
 25503 and (110) (also 117, §9.1.6.1). In the third case, it selects a semi-object, which can
 25504 either be a noun or participle (109), or an infinitival complement clause (110).

- 25505 (108) *rjylpu ri a-tas wuma ku-sna*,
 king also 1SG.POSS-on really PRS-be.kind
 25506 ‘The king is very kind with me.’ (2002 qaCpa, 123)
- 25507 (109) *ly-tcxt ma nyzo a-mtc^hot ui-kui-ndza*
 IMP:UPSTREAM-take.out LNK 2SG 1SG.POSS-offering 3SG.POSS-SBJ:PCP-eat
 25508 *my-tuu-sna*
 NEG-2-be.worthy:FACT
 25509 ‘Spit it out, you are not worthy of being the one eating my offering.’
 25510 (2014, kWLAG, 177)
- 25511 (110) *turme ky-ndza my-sna*
 person INF-eat NEG-be.fit:FACT
 25512 ‘It is unfit for people to eat.’ (12-Zmbroko, 96)

25513 The range of meanings of *mna* only partially overlaps with that of *sna*. First, it
 25514 can ‘feel better, heal’, taking either the disease/wound (111) (see also example 48,
 25515 §16.1.1.7), or the person (or body part) afflicted by it (112) as subject. Note that in
 25516 (111), the verb is in the 3SG form, indexation as intransitive subject the noun *ny-*
 25517 *cq^he* ‘your cough’ rather than the 2SG, showing that this noun cannot be analyzed
 25518 as an essive adjunct (§8.1.7).

- 25519 (111) *ny-cq^he ui-nú-mna?*
 2SG.POSS-cough QU-SENS-be.better
 25520 ‘Is your cough getting better?’ (many attestations)
- 25521 (112) *ui-nú-tuu-mna*
 QU-SENS-2-be.better
 25522 ‘Are you feeling better?’ (smAnmi 2003.2, 119)

25523 Second, *mna* occurs in comparative constructions (§26.2) with the standard
 25524 marker *syz(ny)* (§8.2.7) or the comparee marker *kua* (§8.2.2.7), as in (113) (see also
 25525 56, §5.1.3). By contrast, *sna* is not attested in comparative constructions in the
 25526 whole corpus.

19 Other verbal derivations

- 25527 (113) *nufse pjur-ky-fcyt syz ur-nú-mna?*
like.that IPFV-INF-tell COMP QU-SENS-be.better
25528 ‘Is it better (to explain how to weave with video) than simply by telling
25529 it like that (without video)?’ (vid-20140429090403, 188)

25530 The participle *kua-mna* is lexicalized in the sense of ‘leader, chief’ (example 12,
25531 §16.1.1.1).

25532 The data above suggest that *mna* originally was a lexicalized comparative (‘be
25533 better’) of *sna* (‘be good’), and that these two verbs have undergone distinct se-
25534 mantic specialization (‘be better’ ⇒ ‘feel better, heal’ vs. ‘be good’ ⇒ ‘be worthy,
25535 be fit’). The morphological structure of these verbs is however elusive: the *s-* ele-
25536 ment in *sna* is possibly related to the proprietive *sy-* (§18.8), but the *m-* prefix in
25537 *mna* is isolated in Japhug. It could originate from **w-* with regressive nasalization
25538 from the *n-* of the root.

25539 19.7.11 Reduplication

25540 Reduplication occurs as a secondary exponent of several verbal derivations, includ-
25541 ing Distributed action (§19.4), Reciprocal (§18.4.1), and is also found sporadically
25542 with other derivations (for instance with the antipassive, §18.6.5).

25543 In addition, reduplication is also attested by itself as the only marking of a
25544 valency-changing derivation in the case of *ruru* ‘guard, take care of’, which de-
25545 rives from the intransitive verb *ru* ‘look at’. The base verb *ru* selects a goal in
25546 the dative or with locative marking (§14.2.4, §15.1.2.4), while *ruru* is transitive (as
25547 shown by stem alternation in 114) and the entity taken care of by the subject is
25548 encoded as object.

- 25549 (114) *tce pahts^{hi} nu-rure pju-ŋu ri,*
LNK hogwash IPFV-take.care[III]:FACT IFR.IPFV-be LNK
25550 ‘While he was taking care of the hogwash....’ (2014-kWLAG, 94)

25551 The compound noun *þyrru* ‘miller’ includes as second element the non-reduplic-
25552 ated variant of the same root *-ru* with the same meaning as that of *ruru* ‘guard,
25553 take care of’ (the first element is from the noun *þya* ‘mill’, see §5.5.5.2).

25554 19.7.12 Vowel alternation

25555 The rare verb *rnde* ‘get into trouble’ is only attested in the expression in (115).
25556 The *-t-* suffix shows that this verb is morphologically transitive (§14.3.1), despite
25557 being unable to take an overt object.

- 25558 (115) *ky-rndu svzny puu-rnde-t-a*
 INF-obtain COMIT AOR-get.into.trouble-PST:TR-1SG
 25559 'I not only did not obtain anything, but in addition I got into trouble.'
 25560 (elicited)

25561 The co-occurrence of *rnde* with *rndu* 'obtain' in the expression exemplified
 25562 by (115) is probably not only a matter of euphony, but also of morphological
 25563 relationship (a *figura etymologica*). The verb *rnde* is invariable, but its stem is
 25564 identical to the stem III (§12.2.2.1) of *rndu* as in (116).

- 25565 (116) *uzo stuasti zo tu-ce qhe, tce k^hro zo puu-rnde*
 3SG alone EMPH IPFV:UP-go LNK LNK a.lot EMPH SENS-obtain[III]
 25566 *k^hi.*
 HEARSAY
 25567 'She goes (up there in the mountain), and found a lot of mushrooms
 25568 (they say).' (conversation 14-05-10)

25569 It is possible to suppose that the verb *rnde* is a backformation from the stem
 25570 III of *rndu* 'obtain'. A hypothesis of this type is likely in the case of the defective
 25571 intransitive verb *βze* 'grow' which originates from *βzu* 'make' (§12.2.2.3), due to
 25572 the fact that the stem *βze* never occurs in tenses such as the Aorist and that the
 25573 verb *βzu* 'make' is also used with the meaning 'grow' with a dummy subject
 25574 (§14.3.5).

25575 In the case of *rnde* however, the fact that this rare verb is mainly attested in
 25576 Aorist forms, where a Stem III is not possible makes the backformation hypoth-
 25577 esis less likely. In addition, although the meaning of *rnde* 'get into trouble' is
 25578 relatable to that of *rndu* 'obtain' ('obtain/get problems/trouble'), it is not a sim-
 25579 ple narrowing of the meaning of *rndu*, a verb all of whose attestations refer to
 25580 positive events (see 116 above, as well as 249 in §15.2.10.5).¹³

25581 Alternatively, one could consider that *rnde* 'get into trouble' originates from
 25582 *rndu* 'obtain' by a valency-neutral derivation. The vowel alternation could be
 25583 accounted for by hypothesizing the existence of a *-j suffix (as in the case of the
 25584 Stem III, §12.2.2.1), whose exact function is difficult to describe in the absence of
 25585 other examples.

¹³For the backformation hypothesis to work, one would need to suppose that at an earlier stage, *rndu* 'obtain' with a non-overt object had a negative overtone 'get/obtain it' → 'get into trouble'.

25586 20 Denominal derivations

25587 20.1 Introduction

25588 Denominal verbalizing derivations turn nouns into verbs. Their source can either
25589 be an inalienably or an alienably possessed noun (§5.1.2), an isolated nominal root
25590 or a compound.

25591 These derivations are referred to simply as ‘denominal’ (without specifying
25592 ‘verbalizing’) in this chapter and everywhere else in the grammar, since the only
25593 non-verbalizing denominal derivations, the denominal adverbs (§5.8), are rela-
25594 tively marginal.

25595 Japhug boasts a considerable number of denominal prefixes, most of which
25596 are highly productive (in particular, they can be applied to Tibetan and even
25597 Chinese loanwords). A consequence of the existence of these derivations is that
25598 conjugated verbs in Japhug are not a closed class, unlike in otherwise morpho-
25599 logically rich languages of the Trans-Himalayan family such as Kiranti (Jacques
25600 2017b),¹ where light verb constructions are the only productive way of forming
25601 predicates from nouns.

25602 In the rest of the grammar, the denominal prefixes are not distinguished from
25603 the nominal root in the glosses (the prefixes and the nominal roots are treated as
25604 a single stem). By contrast, in this chapter, the denominal prefixes are segmented
25605 and glossed as DENOM.

25606 This chapter provides a detailed account of all attested denominal prefixes (sec-
25607 tions §20.2 to §20.7). It also describes non-prefixal denominal derivations (§20.8)
25608 and deideophonic verbalizing prefixes (§20.9).

25609 Some denominal prefixes are historically related to various valency-changing
25610 derivations, in particular the antipassive (§20.10). In addition to their basic func-
25611 tion of deriving verbs from nouns, denominal prefixes also occur in compound
25612 verbs (§20.12), incorporating verbs (§20.13), and in verbs recently loaned from
25613 Chinese (§20.11).

¹In the case of Khaling, Jacques et al. (2015) provides an exhaustive list of all primary verbs, which only contains two borrowings from (Thulung and Nepali) and only one clearly denominal verb.

The following subsections present a general overview of the morphological alternations observed in denominal derivations (§20.1.1) and on the functional correspondences between denominal derivations and light verb constructions (§20.1.2), two topics which are treated in more detail in each of the sections in this chapter.

20.1.1 Morphological properties of denominal prefixes

When a noun takes a denominal prefix, the root almost never exhibits any stem alternation. If the base noun is inalienably possessed, the possessive prefix is removed (including in many cases frozen indefinite possessor prefixes in *tu-*/ *tr-*, §5.1.2.10). For instance, the *yṛ-* denominal verb (§20.5) from the inalienably possessed noun *tr-kʰu* ‘smoke’ is *yṛkʰu* ‘have smoke’ (rather than *†yṛtrkʰu*), and the same applies even to the noun *trṛbas* ‘game’ whose *tr-* prefixal element is not an indefinite possessor prefix, but whose denominal form is *yṛṛbas* ‘hunt’. Likewise, when the base noun is a counted noun (§7.3), the numeral prefix is also removed (§20.4.2, §20.5.2). Only action nominalization *tu-* prefixes can be preserved: for example, the lexicalized action nominal *tusqa* ‘wheat gruel’ (from *sqa* ‘cook’, §16.4.4) has the denominal form *rutusqa* ‘eat wheat gruel’ (§20.4.1) rather than *†rusqa*.

Some denominal prefixes, including *suu-/sy-* (§20.3.2), *ruu-/ry-* (§20.4), *yuu-/yṛ-* (§20.5.2), *muu-/my-* (§20.6) and *nuu-/ny-* (§20.7) have either *u* or *v* vocalism (with the variant *a* when the following syllables has a uvular preinitial, §3.5.4). This vowel contrast is partially based on that of the indefinite possessor prefix (*tu-* vs. *tr-*, §5.1.2.1) when the base noun is inalienably possessed, but many exceptions exist.

A handful of denominal verbs have in addition an intrusive *-y-/x-* velar fricative element (like the sigmatic causative, §17.2.1.4), for instance *yṛxpra* ‘send’ from *trpra* ‘messenger’ (§20.5.2).

Denominal prefixes are nearly always located closest to the root than any non-denominal derivational prefix. Only one exception is known: the causative *syzmbru* ‘anger’ from the denominal verb *syrbbru* ‘get angry’, whose causative prefix is irregularly inserted between the denominal prefix *sy-* and the nominal root *-mbru*: *sy-z-mbru* is to be parsed as DENOM-CAUS-anger (§17.2.2.7).

20.1.2 Denominal derivations and light verb constructions

Most denominal derivations described in this chapter are synonymous or near-synonymous with complex predicates involving light verbs such as *βzu* ‘make’,

25649 *lxt* ‘release’ or existential verbs like *tu* ‘exist’. Both types of construction serve to
 25650 integrate a nominal root into a predicate.

25651 For instance, the verb *ruuqajuu* ‘get worms’ and *r̥spuu* ‘fester’, with the *ruu-*/*r̥-*
 25652 denominational prefix (§20.4.1) have the same meaning as the collocation of their base
 25653 noun *qajuu* ‘worm’ and *tr̥-spuu* ‘pus’ with the light verb *βzu* ‘make’, as illustrated by
 25654 (1) where both constructions appear. This example also shows that synonymous
 25655 denominational and light verb constructions from the same nouns lexically select the
 25656 same orientation preverbs: UPWARDS in the case of *r̥spuu/tr̥-spuu+βzu* ‘fester, have
 25657 pus’, and WESTWARDS in that of *ruuqajuu/qajuu+βzu* ‘have worms, grow worms’.

- 25658 (1) *tce [tr̥-spuu tce to-βzu] tce [qajuu no-βzu] ma*
 LNK INDEF.POSS-pus LNK IFR:UP-make LNK worm IFR:WEST-make LNK
 25659 *k̥y-nuqambumbjom u-xc̥t k̥u nuna u-bar*
 INF-fly 3SG.POSS-strength ERG DEM 3SG.POSS-wing
 25660 *u-ndzom yu u-qaa nura to-r̥-spuu q̥e*
 3SG.POSS-bridge GEN 3SG.POSS-bottom DEM:PL IFR:UP-DENOM-pus LNK
 25661 *j̥y-ruu-qajuu*
 IFR:WEST-DENOM-worm
 25662 ‘(Its wing) has pus and worms grew in it, it flew so much that the base of
 25663 its wing festered and had worms.’ (22-qomndroN, 56-59)

25664 In each of the sections of this chapter on denominal prefixes, the correspon-
 25665 ding light verb constructions are systematically indicated.

25666 Although the two constructions are semantically very close, an important dif-
 25667 ference is that in the denominal construction, the noun cannot take external
 25668 determiners like numeral and demonstratives (unlike denominal derivation in
 25669 some Uto-Aztecan languages like Hopi for instance, see Hill 2003). For instance,
 25670 in (2), the verb *c̥y-r̥-r̥j̥it* (from *tr̥-r̥j̥it* ‘child’, §20.4.1) means ‘gave birth to (a) child/
 25671 children’, without any indication on the number of children (the unicity of the
 25672 offspring in this example is deduced from the context of the story).

- 25673 (2) *[u-rzaβ nuu u-sk̥ruu muu-nuu-kui-βdi] nuu,*
 3SG.POSS-wide DEM 3SG.POSS-body NEG-AOR-SBJ:PCP-be.well DEM
 25674 *c̥y-r̥-r̥j̥it*
 IFR-DENOM-child
 25675 ‘His wife, who was pregnant, gave birth to (a) child.’ (Norbzang 2012, 112)

25676 In order to specify the number of children that are born, a collocation with the
 25677 verb *sci* ‘be born’, its causative *susci* ‘give birth to’ or the corresponding posses-
 25678 sive construction with the verb *tu* ‘exist’ are needed instead, as in (3). The same
 25679 meaning cannot be expressed by combining the verb *c̥y-r̥-r̥j̥it* with a numeral.

- 25680 (3) *wu-rjít kunguit tʂ-tu.*
 3SG.POSS-child nine AOR-exist
 25681 ‘She had nine children.’ (14-siblings, 16)

25682 The only cases when a denominal derivation can preserve the modifier of
 25683 a noun is when the modifier is fused with the noun root and both undergo
 25684 the derivation together. For instance, the nominal phrase *tʂʰitʂun paxci* ‘pear’,
 25685 which comprises the noun *paxci* ‘apple’ with the placename *tʂʰitʂun* ‘Chuchen’
 25686 as prenominal modifier (§9.1.8.2, §5.5.1.1) can be verbalized as *nutʂʰitʂunpaxci*
 25687 ‘collect pears’ with the intransitive *nu-* derivation (§20.7.2).

25688 20.2 Contracting prefixes

25689 Contracting denominal prefixes are mono- or disyllabic prefixes which first syllable
 25690 is *a-*, and undergoes vowel contraction in the contexts discussed in §12.3
 25691 like the passive *a-* (§18.1) and the reciprocal derivations (§18.4).

25692 20.2.1 Stative *a-*

25693 The denominal prefix *a-* derives intransitive verbs. Most *a-* denominal verbs are
 25694 stative, and either mean ‘be *X*’ or ‘have the property of *X*’. The stative denominal
 25695 function of *a-* is highly productive, and can be applied to Tibetan loanwords.

25696 Denominal verbs in *a-* can express shape, as in *artaʂ* ‘be forked’ from *tʂ-rtax*
 25697 ‘branch’. They can also refer to a more abstract property of the base noun, as in
 25698 the case of *aci* ‘be wet’, which derives from *tuu-ci* ‘water’ (on which see §5.1.2.11).

25699 Denominal verbs expressing physical defects are most often built with the *a-*
 25700 prefix, for instance *ačkala* ‘be lame’, *azʂwu* ‘be lame’ and *ačquwa* ‘be blind’ from
 25701 *čkala* ‘lame person’, *ʐʂwu* ‘lame person’ (from ʐa.ba ‘cripple’) and *čquwa* ‘blind
 25702 person’, respectively (an exception is *yʂmbyo* ‘de deaf’ with the *yʂ-* prefix, §20.5).

25703 Some denominal verbs in *a-* express a property shared by several entities, for
 25704 instance *ačya* ‘be the same age’ (§14.2.6) from *tuu-čya* ‘tooth’). ² Such verbs can
 25705 have a reduplicated stem, or suffixal syllables, like the verbs *a-fsu~fsu* and *a-fsu-ja*
 25706 both meaning ‘be of the same size’³ from the inalienably possessed noun *wu-fsu*
 25707 ‘of the same size’ (§20.8.2, §26.3.1.3).

25708 Not all *a-* denominal verbs are stative. Dynamic intransitive verbs in *a-* include
 25709 for instance *arju* ‘speak’ (§15.1.5.8) from *tuu-rju* ‘word’, ‘utterance’, and the verbs

²The semantic extension ‘age’ from ‘tooth’ is also found in other Gyalrongic languages, see for instance Lai (2017: 524).

³On the causative form of *afsuja* ‘be of the same size’, see §17.2.5.9 (in particular example 62).

25710 *amqaj* ‘fight’ (scold each other) and *ayro* ‘play’ (with non-singular subjects), from
 25711 *tuu-mqaj* ‘scolding’ and *tryro* ‘game’⁴, which are almost always attested with in-
 25712 fixation of the autative *nua-* as *a<nu>mqaj* and *a<nu>yro*.

25713 Compound nouns of dimension (§5.5.2.2) can derive compound verbs (§20.12)
 25714 meaning ‘of uneven/unequal X’ or ‘spread along the dimension X’ with the *a-*
 25715 prefix, as shown in Table 20.1. Among them, *ajpomxts^hum* ‘have uneven thick-
 25716 ness’ presents an unexplained alternation between /u/ and /o/ alternation: the
 25717 denominational verb has *o* in the first syllable, while the compound noun *jpumxts^hum*
 25718 ‘thickness’ and the base verb *jpum* ‘be thick’ have *u*.

Table 20.1: Denominational verbs from nouns of dimension

Base compound noun	Denominational verb
<i>jpumxts^hum</i> ‘thickness’ (diameter)	<i>ajpomxts^hum</i> ‘be of uneven thickness’
<i>ja^zm^{ba}</i> ‘thickness’ (of a sheet)	<i>aja^zm^{ba}</i> ‘be of uneven thickness’
<i>xt^çuuxte</i> ‘size’	<i>axt^çuuxte</i> ‘be of uneven size’
<i>ta^zki</i> ‘up and down’	<i>ata^zki</i> ‘be aligned on the vertical axis’
<i>lot^hi</i> ‘upstream and downstream’	<i>alot^hi</i> ‘be aligned on the riverine axis’
<i>kundi</i> ‘east and west’	<i>akundi</i> ‘be aligned on the east-west axis’

25719 The causative form of these verbs, regularly built with vowel fusion *suu-ry-*
 25720 (§17.2.1.3), means ‘align/put along the X dimension’ as in (4) (where the upstream-
 25721 downstream dimension refers to the head-tail dimension of the body of the but-
 25722 terfly).

- 25723 (4) *tce nunuw ui-var kui^βde y^γzu ma, ui-p^ha^β*
 LNK DEM 3SG.POSS-wing four exist:SENS LNK 3SG.POSS-half
 25724 *ui-ntsi ri kui-wxti ci, kui-xtcⁱ ci*
 3SG.POSS-one.of.a.pair LOC SBJ:PCP-be.big INDEF SBJ:PCP-be.small INDEF
 25725 *tce [...] nu-nuqambuambjom ri tce nunuw*
 LNK AOR-fly LNK LNK DEM
 25726 *lu-suu-ry-lo-t^hi jnu-ŋu.*
 IPFV:UPSTREAM-CAUS-DENOM-up-downstream SENS-be
 25727 ‘(The butterfly) has four wings, on each side a big one and a small one. (...)

⁴The noun *tryro* ‘game’ is however also possibly interpretable as a deverbal noun, see §16.4.

When it flies, it aligns (its wings) along the ‘upstream-downstream’ axis.’
 (26-qambalWla, 52)

The verbs *ataški*, *alotʰi* and *akundi* and their causative forms select the UPWARDS, UPSTREAM (as in 4) and EASTWARDS preverbs, respectively.

Noun-verb pairs where the verb has *a-* and the noun is an inalienably possessed noun selecting the *tr-* indefinite possessor prefix (for instance the verb *ačqʰe* ‘cough’ and the inalienably possessed noun *tr-čqʰe* ‘cough’) can be interpreted as *a-* denominal derivation, but the opposite directionality (the inalienably possessed noun as a nominalized form of the *a-* prefixed verb) is also possible (see §16.4.6 for a more detailed discussion). Another problematic example of *a-* denominal derivation is *acʰyt* ‘be X years apart’ (§19.7.7).

In some cases, semantic changes either in the verb or the noun have obscured the etymological relationship between them. For instance, it is possible that *aro* ‘have’ is historically related to *tr-ro* ‘excess’, ‘surplus’ (§14.2.3), though there is no synchronic link between these two words.

A certain number of intransitive verbs in *a-* can be suspected of being denominal verbs whose base noun has been lost. This is particularly clear in the case of some verbs expressing shape such as *aβzurχsum* ‘have a triangular shape’ from a noun **βzurχsum* unattested in Japhug, but attested in Tibetan as བୃତ୍ୟୁସ རୂପ རୂପ རୂପ *bzur.gsum* ‘triangle’. Even when the nominal source is not recoverable, as in the case of *artum* ‘be round’, the hypothesis that the *a-* verb comes from a lost noun (in this case, something like **rtum* ‘round object, circle’) can never be ruled out.

The deideophonic *a-* derivation (§20.9.3) is also likely to have a historical relationship with the stative *a-* denominal prefix.

20.2.2 Similative *aru-*

The prefix *aru-* derives stative verbs meaning ‘be *X*-like, be similar to *X*’ from a nominal base. Table 20.2 presents a few representative examples of this prefix. Although these verbs (with the exception of *aruldžajkui* ‘be green’) are relatively rare in the corpus, this derivation is extremely productive and can be applied to Tibetan loanwords, for instance *cog.cog* ‘paper’, *ldžajkui* ‘green’ and *munton* ‘flower’ (from 花 paper, 绿色 green and 花 flower), respectively. It is even found on Chinese loanwords such as 喇叭 *<lāba>* ‘horn’.

Inalienably possessed nouns such as *tr-t̪eu* ‘son’, ‘boy’ are denominalized together with their indefinite possessor prefix (§5.1.2.4).

The *aru-* derivation can take not only noun roots, but also noun phrases as input. For instance, the phrase *qro-mke u-mdor* (pigeon-neck 3SG.POSS-colour)

25764 ‘purple, colour of the pigeon’s neck’ can be denominalized as *aruqromkemdos* ‘be
25765 purple’.

Table 20.2: Examples of the *aru-* similitive denominal prefix

	Base noun	Denominal verb
	сөрөсөр ‘paper’	<i>aruisoros</i> ‘be like paper’
	<i>fsapax</i> ‘animal’	<i>arufsapax</i> ‘be like an animal’
	<i>kʰutsa</i> ‘bowl’	<i>arukʰutsa</i> ‘be like a bowl’
	<i>taqaβ</i> ‘needle’	<i>aruitaqaβ</i> ‘be like a needle’
	<i>ldzajku</i> ‘green’	<i>aruldzajku</i> ‘be green’
	<labu> ‘horn’	<i>arulabu</i> ‘be shaped like a horn’
	<i>suijno</i> ‘grass’	<i>arusuijno</i> ‘be like grass’
	<i>tx-tçuu</i> ‘son’, ‘boy’	<i>arutxtçuu</i> ‘be boyish’
	<i>txipa</i> ‘snow’	<i>arutxipa</i> ‘be like snow’
	<i>muunto</i> ‘flower’	<i>arumuento</i> ‘be like a flower’

25766 With colour nouns, including those borrowed from Tibetan like *ldzajku* ‘green’
25767 and *ksmyrsmuy* ‘dark red’ (§5.2.2) and others like *qro-mke u-mdos* ‘purple’, the de-
25768 nominal verbs in *aru-* simply mean ‘be *X*, have the colour *X*’, as in (5).

- 25769 (5) *tce kuimak xcaj nura aru-ldzajkuu kuu-fse ma*
 LNK other grass DEM:PL DENOM-green:FACT SBJ:PCP-be.like LNK
 25770 ‘The other plants (around it) are (very) green.’ (22-BlamajmAG, 22)

25771 Denominal verbs in *aru-* are often used in similitive constructions with de-
 25772 gree nominals, either as nominal predicates as in (6) (§16.3.3) or in the degree
 25773 construction (7) (§16.3.4). Note that the connotation of these similitive verbs can
 25774 be culture-specific: although *arumuento* ‘be like a flower’ can be understood as
 25775 ‘be as beautiful as a flower’, its most natural interpretation is surprisingly ‘worth-
 25776 less’ (because flowers are viewed as not lasting long, and prone to withering).

- 25777 (6) *u-tuu-yrui-muento nu!*
 3SG.POSS-NMLZ:DEG-DENOM-flower SFP
 25778 ‘It is as (worthless) as a flower.’ (elicited)
- 25779 (7) *u-tuu-wyrum kuu juu-yrui-txipa zo*
 3SG.POSS-NMLZ:DEG-be.white ERG SENS-DENOM-snow EMPH
 25780 ‘It is white as snow.’ (elicited)

They also occur in participial form as *kui-yrui-taqab* ‘that is like a needle’ in (8), often with the similitative stative verb *fse* ‘be like’.

- (8) *u-jwaß u-ts^huiya nunuu kui-yrur-taqab*
 3SG.POSS-leaf 3SG.POSS-shape DEM SBJ:PCP-DENOM-needle
kui-fse naχteuy ri,
 SBJ:PCP-be.like be.identical:FACT LNK
 ‘The shape of its leaves is similar (to those of the fir) in that they are like needles.’ (11-mYAm, 74)

Additional examples of similitative constructions involving these verbs can be found in Jacques (2018d) and §26.3.3.2.

20.2.3 Proprietive *ary-*

The *ary-* denominal prefix has a proprietive meaning, and is generally correlated with partial reduplication of the nominal stem as in *aryrq^hurq^hioꝝ* ‘be grooved’ (9) from *tr-rq^hioꝝ* ‘groove’.

- (9) *u-ru nuara t^h-kui-ryy-rq^hu~rq^hioꝝ kur-fse ci*
 3SG.POSS-stalk DEM:PL AOR-SBJ:PCP-DENOM-groove SBJ:PCP-be.like INDEF
ŋu q^he,
 be:FACT LNK
 ‘Its stalk is like it has had many groovings on it.’ (14-sWNgWJu, 45)

The *ary-* prefix can also be used to derive verbs from counted nouns as for instance *aryqur₁ry₂* ‘be striped’ from *tui-cr₁ry₂* ‘one stripe’. The verb *aryk^humk^hyl* ‘be clustered in patches’, ‘not homogeneously distributed’ from *tui-k^hyl* ‘one place’ has the very rare partial reduplication pattern in *-um* (*ary-k^hum~k^hyl*, §19.4.2.2).

Non-reduplicated *ary-* denominal verbs are also found, for instance *aryts^hi* ‘be cooked like rice gruel’ (from *tuits^hi* ‘rice gruel’, a lexicalized nominalization from *ts^hi* ‘drink’) and *aryryy* ‘happen at the predicted time’ from *u-ryy* ‘predicted time’ (on which see §8.3.5).

- (10) *azo a-zuβ p^hy-k-ryy-ryy-ci*
 1SG 1SG.POSS-sleep IFR-PEG-DENOM-predicted.time-PEG
 ‘I feel sleepy at the expected time.’ (elicited, can be said when one feels sleepy at the same hour in the afternoon when one went to sleep the previous days)

Like other compound denominal prefixes (§20.2.4.2), the *ary-* prefix loses its *a*-element when subjected to causative derivation. For instance, *arytsʰi* ‘be cooked like rice gruel’ has the causative form *zrytsʰi* ‘cook like rice gruel’ (§17.2.2.8).

The *ary-* prefix should not be confused with the reciprocal from transitive verbs in *ry-*. For instance *aryzduzda* ‘call each other’ (before departure) does not directly come from the noun *tū-zda* ‘companion’, but is rather the reduplicated reciprocal (§18.4.1) of the denominal verb *ryzda* ‘call before departure’ derived from this noun.

20.2.4 Proprietive *ayu-*

The prefix *ayu-* derives proprietive stative verbs meaning ‘have a lot of *X*’ or ‘produce a lot of *X*’. For instance, Tshendzin provided the definition in (11) for the proprietive denominal *ayu-mdzu* from *ty-mdzu* ‘thorn’.

(11)	<i>jnu-ryu-mdzu</i> ,	<i>u-taš</i>	<i>ty-mdzu</i>	<i>jnu-dyn</i>
	SENS-DENOM:PROP-thorn	3SG.POSS-on	INDEF.POSS-thorn	SENS-be.many
	<i>kṛ-ti</i>	<i>jnu-ŋu</i> .		
	OBJ:PCP-say	SENS-be		

‘(The word) *jnu-ryu-mdzu* means ‘there are a lot of thorns on it’ (elicited)

When the base noun is inalienably possessed (§5.1.2) or when it is a counted noun (§7.3), the denominal prefix is directly attached to the root, and the indefinite possessor prefixes *tū-*, *ty-*, *ta-* or the numeral prefixes are removed, as shown in the examples in Table 20.3. The *ayu-* prefix is invariable, without an allomorph such as *†ayr-* as could have been expected (§5.1.3) when the base noun selects the indefinite possessor prefix *ty-*.

This prefix is very productive, and occurs on nominal bases borrowed from Tibetan (such as *rjul* ‘silver’, *u-mdor* ‘colour’, *tuy* ‘poison’ and *smṛn* ‘medicine’ (respectively from རྗྱଲ དྗྱଲ ‘silver’, མྷྱଣ མྷྱଣ ‘colour’, གྟྤྱ གྟྤྱ ‘poison’ and མྷྱଣ མྷྱଣ ‘medicine’) and even Chinese (*tū-ʂwaj* ‘a pair’ from 双 <shuāng> ‘pair’).

Another possible meaning of the *ayu-* prefix is ‘be the same *X*’, as in the case of *ayumdor* ‘be the same colour’ from *u-mdor* ‘colour’. These types of verbs have non-singular intransitive subjects, as in (12) with a comitative phrase (§8.2.5).⁵

⁵Concerning the absence of dual indexation on the verbs in (12), see §14.6.1.1.

Table 20.3: Examples of the *ayu-* proprietive denominal prefix

Base noun	Denominal verb
<i>tu-ça</i> ‘flesh’	<i>ayuça</i> ‘have a lot of meat’
<i>tx-jwaꝝ</i> ‘leaf’	<i>ayujwaꝝ</i> ‘have a lot of leaves’
<i>tx-mdzu</i> ‘thorn’	<i>ayumdzu</i> ‘have a lot of thorns’
<i>tu-mnaꝝ</i> ‘eye’	<i>ayumnaꝝ</i> ‘have eyes’, ‘have a lot of holes’
<i>tx-ŋgyr</i> ‘fat’	<i>ayungyr</i> ‘have a lot of fat’
<i>tx-rjít</i> ‘child’	<i>ayurjít</i> ‘have many children’
<i>tx-rme</i> ‘hair’	<i>ayurmé</i> ‘have a lot of hair’
<i>rjul</i> ‘silver’	<i>ayurjul</i> ‘have much money’
<i>zruy</i> ‘louse’	<i>ayuzruy</i> ‘have a lot of lice’
<i>tx-ntxβ</i> ‘bubble’	<i>ayuntxβ</i> ‘be sparkling’
<i>tx-ndzuy</i> ‘resin’	<i>ayundzuy</i> ‘be resinous’
<i>tu-yli</i> ‘dung’	<i>ayuyli</i> ‘produce a lot of dung’
<i>ta-mar</i> ‘butter’	<i>ayumar</i> ‘produce a lot of butter’
<i>u-mat</i> ‘fruit’	<i>ayumat</i> ‘produce a lot of fruits’
<i>u-duuχun</i> ‘fragrance’	<i>ayuduuχun</i> ‘be fragrant’
<i>tuy</i> ‘poison’	<i>ayutuy</i> ‘be poisonous’
<i>smyn</i> ‘medicine’	<i>ayusmyn</i> ‘have a medical effect’
<i>u-mdor</i> ‘colour’	<i>ayumdoꝝ</i> ‘be the same colour’
<i>u-ŋgu</i> ‘inside’	<i>ayunŋguŋgu</i> ‘have a lot of layers’
<i>tu-jax</i> ‘hand, arm’	<i>ayujiuaꝝ</i> ‘have a lot of arms’
<i>tu-mi</i> ‘foot, leg’	<i>ayumumi</i> ‘have a lot of leg’
<i>tu-rpaꝝ</i> ‘shoulder’	<i>ayurpaꝝ</i> ‘go along well’
<i>tu-ʂwaŋ</i> ‘a pair’	<i>ayuʂwaŋ</i> ‘match’

- 25836 (12) *u̥-ru* *c^ho* *u̥-fkaβ* *ra ayumdo^b* *zo*
 25837 3SG.POSS-stalk COMIT 3SG.POSS-cover PL DENOM-colour:FACT EMPH
arŋi.
 25838 be.green:FACT
 25839 ‘Its stalk and its cap are the same green colour.’ (of a species of mushroom) (22-BlamajmAG, 121)

25840 A few *ayu-* denominal verbs, such as *ayutuy* ‘be poisonous’ from *tuy* ‘poison’,
 25841 have a more abstract proprietive function (‘have the property of X’) like that
 25842 of the *sx-* prefix (note the synonym *sxndry* ‘poisonous’, §20.3.1). Other semantic
 25843 values of the *ayu-* prefix are discussed in §20.2.4.3.

25844 The *ayu-* denominal prefix has cognates in other Gyalrong languages, for ex-
 25845 ample *pwə-* in Tshobdun (Sun 2014a).

20.2.4.1 Reduplication

25847 Emphatic reduplication (§12.4.3) is possible as an option on denominal verbs, but
 25848 some verbs in *ayu-* occur with obligatory reduplication of the nominal root, for
 25849 instance *ayujujas* ‘have a lot of arms’ and *ayumumi* ‘have a lot of legs’ (13). Note
 25850 that the alternative form *ayujas* without reduplication is also attested, but with
 25851 a completely different meaning (§20.2.4.3).

- 25852 (13) *NGOCna p̥u̥-γyuu-jui~ja^b* *p̥u̥-γyuu-mu̥~mi*, *u̥-mxlyjas*
 25853 spider SENS-DENOM-EMPH~arm SENS-DENOM-EMPH~leg 3SG.POSS-limbs
p̥u̥-dyn
 25854 SENS-be.many
 ‘The spider has many arms and legs, its limbs are many.’ (elicited)

20.2.4.2 Causative

25855 Only a few causative verbs derived from *ayu-* denominal verbs are attested. In-
 25856 stead of expected vowel fusion (†*suu-γyuu-* → *sγyuu-*, see §17.2.1.3), the *a-* element
 25857 is dropped and replaced by the *z-* allomorph of the sigmatic causative (§17.2.2.8).
 25858 For instance, the stative verb *ayuŋguŋgu* ‘have a lot of layers’ (from *u̥-ŋgu* ‘in-
 25859 side’, with reduplication, §20.2.4.1) has the causative form *zγuŋguŋgu* ‘put on a
 25860 lot of layers’ as in (14).
 25861

- 25862 (14) *w-rzaβ nur ku, [...] <huangdi> yuu w-rte nur χsum zo*
 3SG.POSS-wife DEM ERG emperor GEN 3SG.POSS-hat DEM three EMPH
 25863 *pjx-z-yuu-ŋgu~ŋgu pjax-nyrte*
 IFR-CAUS-DENOM-EMPH~inside IFR-wear
 25864 ‘His wife wore three imperial crowns one on the top of the other.’ (140430
 25865 yufu he tade qizi-zh, 227)

20.2.4.3 Lexicalized denominal verbs

25866 The semantics of the *ayu-* derivation is not always trivially predictable.
 25867 Some of the lexicalized meanings are relatable to one of the basic functions
 25868 of this prefix. For instance, *ayušway* ‘match’ (to each other) (15) from *tuu-sway* ‘a
 25869 pair’ presumably derives from an earlier ‘have the property of being a pair’.

- 25870 (15) *tce [u-βyri ta-tuat] c^ho [w-q^hu*
 LNK 3SG.POSS-before AOR:3→3-say[II] COMIT 3SG.POSS-after
 25871 *ta-tuat] nura maka mur-pjx-k-yyuu-šway-ci*
 AOR:3→3-say[II] DEM:PL at.all NEG-IPFV.IFR-PEG-DENOM-pair-PEG
 25872 ‘The things he said in the beginning and those that he said later did not
 25873 correspond to each other.’ (contradicted each other) (2011-10-qajdo, 78)

25874 Other denominal verbs have meanings that are completely unpredictable. For
 25875 example, the denominal verb *ayušjak* from *tuu-jak* ‘hand, arm’, rather than mean-
 25876 ing ‘have arms’ as expected (see however §20.2.4.1), either occurs in the sense of
 25877 ‘fidget, touch other peoples’ things (like a thief)’ or ‘do things (with one’s hands)
 25878 quickly’. The metaphorical extensions on which the unpredictable meanings of
 25879 *ayu-* are sometimes shared with other denominal derivations. For instance, *ayur-
 25880 pax* ‘go along well’ (with non-singular subject) from *tuu-rpa* ‘shoulder’ presents
 25881 the same semantic derivation as the transitive denominal verb *nypax* ‘go along
 25882 well with’ (from ‘carry on the shoulder’, §20.7).

25883 Some lexicalized *ayu-* denominal verbs additionally present unusual argument
 25884 structure. Unlike other *ayu-* verbs which are plain intransitives, *ayuruaz* ‘inherit
 25885 from’ (either from *w-ruz* ‘species’, borrowed from ສັນ rigs ‘race’, or from ຮຸນ rus
 25886 ‘bone, lineage’) is a semi-transitive verb (§14.2.3), taking as semi-object the person
 25887 or group of people one inherits a trait from as in (16).
 25888

- 25889 (16) *tuu-mu ra a-nui-kuu-yyuruaz q^he, nui*
 GENR.POSS-mother PL IRR-PFV-GENR:S/O-inherit LNK DEM
 25890 *nui-cyyrgu a-pui-sna, tuzo tuu-cyyrgu*
 3PL.POSS-tooth.quality IRR-IPFV-be.good GENR GENR.POSS-tooth.quality

25891 *nui-sna*

SENS-be.good

25892 'If one inherits from one's mother's (lineage), and (people from) one's
 25893 mother's (lineage) have good tooth quality, then one will (also) have good
 25894 tooth quality.' (27-tWCGArgu, 11-12)

25895 **20.2.4.4 Comitative adverbs**

25896 The *ayu-* denominal derivation has served as the basis for the development of a
 25897 separatee morphological category: denominal comitative adverbs (Jacques 2017d,
 25898 §5.8.1).

25899 Comitative adverbs are built by combining the prefix *kryu-* (or *k̪y-*, a borrow-
 25900 ing from Tshobdun, §5.8.1) to the partially reduplicated stem of the base noun,
 25901 as in *kryu-rtuu~rtaꝝ* 'together with its branches' from *tr-rtaꝝ* 'branch' or *kryu-
 25902 rjui~rjit* 'together with his/her/its children' from *tr-rjit* 'child'. These adverbs
 25903 are formally homophonous with the *ku-* subject participles (§16.1.1) or stative
 25904 infinitives (§16.2.1.1) of the *ayu-* denominal verbs with emphatic reduplication
 25905 (§20.2.4.1).

25906 For example, the surface form /k̪yurrturtarꝝ/ can be parsed either as a comi-
 25907 tative adverb *kryu-rtuu~rtaꝝ* 'together with its branches' or as the participle *ku-
 25908 ryu-rtuu~rtaꝝ* 'the one which has many branches' as in (17).

- 25909 (17) *si kui-yyuu-rtuu~rtaꝝ ki kui-fse nui-car-nui*
 tree SBJ:PCP-DENOM-EMPH~branch this SBJ:PCP-be.this.way IPFV-search-PL
 25910 'They search for a tree having a lot of branches like this.' (elicited)

25911 Examples (18a) and (18b) present a minimal pair contrasting the participle
 25912 'have many children' on the one hand and the comitative adverb 'with his/her
 25913 children' on the other hand (both pronounced /k̪yurjurjit/).

- 25914 (18) a. *icqʰa tcʰeme nui kui-yyuu-rjui~rjit ci*
 the.aforementioned woman DEM SBJ:PCP-DENOM-EMPH~child INDEF
 25915 *pui-ŋu*
 PST.IPFV-be
 25916 'This woman had a lot of children.' (elicited)
 b. *kryu-rrjui~rjit zo jo-nui-ce-nui*
 COMIT-children EMPH IFR-VERT-go-PL
 25918 'She/They went back with their children.' (elicited)

The comitative adverbs result from the reanalysis of a non-finite form of proprietive *ayu-* denominal verb, possibly a subject participle or an infinitive in verbal function (§16.2.1.7), with a trivial semantic change from proprietive ‘have many *X*’ to comitative ‘together with *X*’ (on the semantic proximity of the two categories, see for instance Sutton 1976; Patz 1991; Stassen 2000; Stolz et al. 2006; Arkhipov 2009).

20.2.5 Collective *andzi-*

The *andzi-* collective denominal prefix is attested in only one example: *andzirya* ‘be neighbours’ from *tr-rya* ‘neighbour’, as in (19).

- (19) *jui-yndzi-rya-ndzi*
 SENS-DENOM-neighbour-DU
 ‘They are one next to the other.’ (elicitation)

This prefix is historically related to the *andzu-* reciprocal (§18.4.3), and the social collective *kvndzi-* prefix (§5.7.8.1) derives from the combination of the denominal *andzi-* with the *kui-* subject participle prefix (§16.1.1). The surface form /kvndzirya/ is ambiguous between the collective ‘neighbours’ and the participle ‘who are neighbours to each others, placed one next to each other’ as in (20).

- (20) *tceri tui-tui-rdoꝝ tui-tui-rdoꝝ jui-ŋu ma*
 LNK one-one-piece one-one-piece SENS-be LNK
kui-yndzi-rya kui-fse kui-rry-k^hum~k^hy̥l
 SBJ:PCP-DENOM-neighbour SBJ:PCP-be.like SBJ:PCP-DENOM-EMPH~place
kui-fse maje.
 SBJ:PCP-be.like not.exist:SENS
 ‘(This type of mushroom grows) one by one (in isolated), not one next to the other (clustered together), not in patches.’ (24-zwArqhAjmAG, 81-82)

Although none of the other social collective nouns has a corresponding *andzi-* stative verb synchronically, this derivation must have been more widespread at an earlier stage. It is possible that the *ndzi-* element of this prefix is related to the dual *ndzi-* found in the possessive paradigm and pronouns (§6.1), though how exactly this prefix was built remains unclear.

20.3 Sigmatic denomininal prefixes

20.3.1 Proprietive *sy-*

Proprietive verbs in *sy-* are derived from nouns in *tr-*, either from inalienably possessed nouns selecting the indefinite possessor prefix *tr-* (§5.1.2) or from nouns with a frozen *tr-* prefix. These stative verbs are almost always paired with corresponding dynamic verbs in *nr-* (more rarely *nu-*, §20.7.3). As shown by Table 20.4, the base nouns can either be entities (*tr-ndry* ‘poison’) or actions (*tr-re* ‘laugh’). The proprietive denomininal verbs, like *sy-*-proprietary verbs (§18.8), take as intransitive subject the stimulus of the action (perceptible by or affecting other entities). They have a meaning very close to that of the *ayu-* proprietive denomininal verbs (§20.2.4), in particular *ayutuy* ‘be poisonous’ from *tuy* ‘poison’, which has the same meaning as *syndry* ‘be poisonous’.

The corresponding *nu-/nr-* verbs can be either intransitive, transitive or labile (§14.5.1.2). Their subject corresponds to the experiencer of the perception/feeling caused by the stimulus. When used transitively, these verbs select the stimulus as object, like tropative verbs (§17.5): the intransitive subject of *syre* ‘be ridiculous’ and *symts^hyr* ‘be strange’ is the same entity as the object of *nrre* ‘laugh at’ and *nrmcts^hyr* ‘find strange’.

Table 20.4: Examples of the denomininal *sy-*-proprietary denomininal prefix and corresponding *nr-*-denomininal verbs

Base Noun	<i>sy-</i> -denomininal (stimulus)	<i>nr-</i> -denomininal (experiencer)
<i>tr-ndry</i> ‘poison’	<i>syndry</i> ‘be poisonous’ (vi)	<i>nrndry</i> ‘be poisoned’ (vi)
<i>tr-re</i> ‘laugh’	<i>syre</i> ‘be ridiculous’ (vi)	<i>nrre</i> ‘laugh’ (vi), ‘laugh at’ (vt)
<i>trmcts^hyr</i> ‘strange thing’	<i>symts^hyr</i> ‘be strange’ (vi)	<i>nrmcts^hyr</i> ‘find strange’ (vt)
<i>rryom</i> ‘outrage’, ‘vexation’	<i>syrryom</i> ‘outrage’	<i>nuryom</i> ‘be outraged’ (vt)
<i>tr-mbru</i> ‘anger’	<i>symbru</i> ‘get angry’ (vi)	<i>nrmbru</i> ‘get angry with’ (vt)

The presence of the loanword *-mts^hyr* from ମନ୍ତସ୍ତାର୍ ମନ୍ତସ୍ତାର ‘wondrous, strange’ among the verbs in Table 20.4 shows that both denomininal derivations are productive.

The historical relationship between denominal *sy-* and *ny-* prefixes on the one hand, and proprietive and tropative prefixes on the other hand, is explored in §20.10.2.

Proprietive denominal verbs in *sy-* do not have tropative forms, and instead form the corresponding *ny-* denominal verb instead. For instance *syŋaβ* ‘be unpleasant’, ‘be embarrassing’ (21) lacks a tropative *tny-syŋaβ*, and instead requires the corresponding transitive denominal tropative *nyŋaβ* ‘consider to be unpleasant’, ‘be embarrassed by/to’ (22).

- (21) *ayumdzu tce, [ky-nyjaβ]*
 have.thorns:FACT LNK INF-touch.with.hand
sy-ŋaβ.
 DENOM:PROP-unpleasant:FACT
 ‘It is thorny, and unpleasant to touch with the hand.’
- (22) *sruunmuu nuu kuu za [ky-ti uu-rqo my-kuu-łob]*
 demoness DEM ERG early INF-say 3SG.POSS-throat NEG-SBJ:PCP-come.out
tce [ky-ti kur-ny-ŋaβ] to-zyypa tce,
 LNK INF-say SBJ:PCP-DENOM:TROP-unpleasant IFR-pretend LNK
 ‘The demoness pretended to be to be embarrassed to say it for a long
 time.’ (28-smAnmi, 43)

Example (21) also illustrates that some denominal verbs in *sy-* can select complement clauses as intransitive subjects. In those cases, the corresponding *ny-* denominal verbs are found with complement clauses as objects (22).

The verb *syŋaβ* ‘be unpleasant’ is also remarkable in that it appears as first element of a the nominal compound *syŋaβdi* ‘unpleasant smell’ (§5.5.6).

Some of the denominal verbs in *sy-* and *ny-* have semantic extensions that are not immediately predictable from the base verb. For instance, the denominal verbs from *trya* ‘visible’, ‘in the open’ are lexicalized: *syra* is used in the sense of ‘be accessible and safe’ (of roads, places), and *nyra* is a stative verb meaning either ‘be completely visible’ or ‘not feel vertigo (while being in a steep place)’ (24).

- (23) *ts^hywyre nuunu, aþynduundyt zo tce, uu-jak-pa nuu wuma*
 gecko DEM everywhere EMPH LNK 3SG.POSS-hand-under DEM really
zo juu-jfob tce, ts^hi kuu-fse zo
 EMPH SENS-PASS-glue LNK what SBJ:PCP-be.like EMPH

25994 *mr-kur-syya* *tr-a<nuu>ri* *kuny pjuu-xtyr*
 NEG-SBJ:PCP-be.accessible AOR:UP-<AUTO>go[II] also IPFV-fall
 25995 *múij-cʰa.*
 NEG:SENS-can
 25996 'The gecko, the palms of its paws are very adhesive, and no matter how
 25997 steep and inaccessible the places it goes up to, it cannot fall down.'
 25998 (28-tshAwAre, 19-20)

25999 (24) *pras uu-tas* *nuu-nyya*
 cliff 3SG.POSS-on SENS-not.feel.vertigo
 26000 'He does not feel vertigo on the cliff.' (elicited)

26001 The denomininal verb *sy̥mbruu* 'get angry', which derives from the noun *tr-mbruu*
 26002 'anger' with the prefix *sy̥-*, differs from all proprietive denomininal verbs in Ta-
 26003 ble 20.4 in that it selects as subject the experiencer rather than the stimulus, as
 26004 shown by (25) with 2SG indexation. The verb used to express the corresponding
 26005 proprietive meaning is *sy̥mbruuygu* 'be detestable' ('cause people to get angry', a
 26006 denomininal incorporating verb, §20.13.1, §22.4.3.2). The corresponding transitive
 26007 verb *ny̥mbruu* 'get angry with' is the functional applicative of *sy̥mbruu* 'get angry',
 26008 as both verbs encode the same type of referent as subject.

26009 (25) *ma-tr-tuu-sy̥-mbruu*
 NEG-IMP-2-DENOM:PROP-anger
 26010 'Don't get angry!' (140425 shizi lang huli-zh, 22)

26011 Another unexplained irregularity of *sy̥mbruu* 'get angry' is the causative form
 26012 *sy̥zmbuu* 'anger', with the causative *z-* infix between the denomininal prefix and
 26013 the nominal root (§17.2.2.7).

26014 20.3.2 Causative/instrumental *sV-*

26015 The sigmatic prefix *su(y)-/sy̥-* has a causative 'cause to be/have *X*' or instru-
 26016 mental 'use *X*' denomininal function. As illustrated in Table 20.5, most of the de-
 26017 nomininal verbs derived with this prefix are morphologically transitive, the only
 26018 exceptions being *sußejlu* 'be left-handed' ('use the left hand') and *sundzupe* 'sit
 26019 without crossing legs'.

26020 The *su(y)-/sy̥-* allomorphy of this denomininal prefix has similarities with that
 26021 of the sigmatic causative (§17.2.1). The allomorph *sy̥-* is selected when the base
 26022 noun is an inalienably possessed noun selecting the *tr-* indefinite possessor pre-
 26023 fix (such as *tr-kʰuu* 'smoke') or with frozen *tr-* prefix (such as *trçyt* 'comb'), *suy-*/

20 Denominal derivations

26024 *sux-* occurs with monosyllabic nominal roots without cluster and uvular or velar
 26025 onsets such as *tsʰaʂ* ‘sieve’ (a context similar to that of the *suy-* allomorph of the
 26026 sigmatic causative, §17.2.1.4), and *su-* is found in all other contexts, including in-
 26027 alienably possessed nouns selecting the *tui-* indefinite prefix (*tui-jaʂndz̥u* ‘finger’)
 26028 and/or non-inalienably possessed nouns with initial clusters.

Table 20.5: Causative/Instrumental denominal verbs

Base noun	Denominal verb
<i>bejlu</i> ‘left hand’	<i>suibejlu</i> ‘be left-handed’ (vi)
<i>ndzupe</i> ‘sitting position’ (without crossing legs)	<i>sundzupe</i> ‘sit without crossing legs’ (vi)
<i>tuiqartsu</i> ‘kicking’	<i>suiqartsu</i> ‘kick’ (vl)
<i>laʂrdyʂ</i> ‘kicking with forelegs’	<i>suiqartsu</i> ‘kick with forelegs’ (vl)
<i>tx-kʰu</i> ‘smoke’	<i>syrkʰu</i> ‘smoke’ (vt)
<i>tx-rmi</i> ‘name’	<i>syrmi</i> ‘name someone’ (vt)
<i>tx-yur</i> ‘fence’	<i>sryur</i> ‘enclose’ (with a fence) (vt)
<i>txçrt</i> ‘comb’ (n)	<i>sryçrt</i> ‘comb’ (vt)
<i>txmcar</i> ‘tongs’	<i>srymcar</i> ‘take with tongs’ (vt)
<i>txtʂu</i> ‘lamp’	<i>srytʂu</i> ‘illuminate with a lamp’ (vt)
<i>tui-jaʂndz̥u</i> ‘finger’	<i>suijaʂndz̥u</i> ‘point’ (with the finger) (vt)
<i>tui-çtsi</i> ‘sweat’	<i>suiçtsi</i> ‘cause to sweat’ (vt)
<i>fsaq</i> ‘fumigation’	<i>sufsaq</i> ‘fumigate’ (vt)
<i>tsʰaʂ</i> ‘sieve’ (n)	<i>suixtsʰaʂ</i> ‘sieve’ (vt)
<i>tsʰwi</i> ‘dye’ (n)	<i>suixtsʰwi</i> ‘dye’ (vt)
<i>ftçaka</i> ‘method’	<i>sryftçaka</i> ‘prepare’ (vt)

26029 Denominal verbs in *sui(y)-/sry-* do not correspond to a single light verb construc-
 26030 tion. In the case of *sundzupe* ‘sit without crossing legs’, the denominal deriva-
 26031 tion has a meaning similar to that of the base noun *ndzupe* ‘sitting position of
 26032 women on the ground, without crossing legs’ in collocations with the light verb
 26033 *βz̥u* ‘make’ (§22.4.2.1) as in (26).

- 26034 (26) *tcʰeme nuu* *ky-kur-y<nu>mdzui* *tce* *ndzupe* *ntsui*
 girl DEM AOR-GENR:S/O-<AUTO>sit LNK sitting.position always

- 26035 *pú-wy-βzu* *pui-ra*.
 IPFV-INV-make PST.IPFV-be.needed
 26036 ‘Women, when they sat, had to sit with both legs folded on one side,
 26037 without crossing legs.’ (31-khAjmu, 24)

26038 With nouns expressing striking actions such as *tūqartsu* ‘kicking’,⁶ *sui-* derives
 26039 labile verbs like *suiqartsu* ‘kick’ (§14.5.1.2) corresponding to collocations with *lxt*
 26040 ‘release’ (§22.4.2.2).
 26041 Other verbs such as *suciṣi* ‘cause to sweat’ and *syrmi* ‘name someone’ (‘cause
 26042 to be named’), have the same meanings as collocations of the base nouns with
 26043 the verb *tçyt* ‘take out’, as shown by the pair (27a) and (27b) from the same story,
 26044 and example (28).

26045 (27) a. *ɬyndzitylytsʰab tu-sy-rmi-nu* *pui-ŋu ma*,
 delphinium IPFV-DENOM:CAUS-name-PL SENS-be LNK
 ‘People call it (a species of *Delphinium*) *ɬyndzitylytsʰab*.’
 (13-NanWkWmtsWG, 135)
 26046 b. *tce nuw u-rmi* *nuw ɬyndzitylytsʰab to-tçyt-nu* *tce nuw*
 LNK DEM 3SG.POSS-name DEM delphinium IFR-take.out-PL LNK DEM
 26047 *pui-ŋu*.
 SENS-be
 26048 ‘This is why people call it *ɬyndzitylytsʰab* ‘demon milk-filter’.
 26049 (13-NanWkWmtsWG, 140)

26050 (28) *li tur-ctsi zo pjua-tçyt tu-mŋym ŋu*.
 again GENR.POSS-sweat EMPH IPFV-take.out IPFV-hurt be:FACT
 26051 ‘It hurts again so much that it causes one to sweat.’ (25-kACAl, 98)

26052 The verb *sykʰuu* can either mean ‘burn to make smoke’ (taking a noun such
 26053 as *çry* ‘juniper’ as object) or ‘smoke out by directing smoke towards X’. In the
 26054 second case, this verb is equivalent to the combination of the base noun *tx-kʰuu*
 26055 ‘smoke’ with the causative form *sux-çe* ‘send, cause to go’ as shown by example
 26056 (29), where both the denominal *sykʰuu* and the noun-verb collocation appear.

26057 (29) *icqʰa si kʰoŋryl tx-kʰri nuw u-ŋgu*
 the.aforementioned tree hollow AOR-SBJ:PCP-go[II] DEM 3SG.POSS-in
 26058 *kuny li [...] tu-ce qʰe, tce u-pa*
 also again IPFV:UP-go LNK LNK 3SG.POSS-down

⁶The *tuu-* prefix on *tugartsu* ‘kicking’ may either be a frozen possessor prefix, action nominal prefix or numeral ‘one’ prefix.

- 26061 *tu-sy-k^huu-nuu.* *u-pa* *smi pjú-wy-βluu* *q^he*
 IPFV:UP-DENOM:CAUS-smoke-PL 3SG.POSS-down fire IPFV-INV-burn LNK
- 26062 *tx-k^huu* *tu-suux-ce-nuu* *q^he,*
 INDEF.POSS-smoke IPFV:UP-CAUS-go-PL LNK
- 26063 ‘(When the bear_i) goes up in a hollow tree, (the hunters) smoke it_i from
 26064 the bottom (of the tree), they make a fire and send the smoke upwards
 26065 (towards the bear, to smoke it out).’ (21-pri, 67-69)

26066 Other denominal verbs such as *sufsay* ‘fumigate’ lack a corresponding light
 26067 verb construction with the same meaning: although a construction combining
 26068 the noun *fsay* ‘fumigation’ and the verb *ta* ‘put’ exists (§22.4.2.6), it means ‘make
 26069 fumigations’ and cannot take a patient like the object *k^hyrda_s* ‘khatag’ in (30).

- 26070 (30) *k^hyrda_s to-su_i-fsay* *q^he, c^hy-mqlas* *q^he,*
 Khatag IFR-DENOM:CAUS-fumigation LNK IFR-swallow LNK
 26071 ‘She fumigated the khatag and swallowed it.’ (Gesar 2003, 63)

26072 The verb *syftçaka* ‘prepare’ stands out among transitive verbs with a sigmatic
 26073 denominational prefix in lacking the causative/instrumental meaning. The semantics
 26074 of this denominational verb does not directly derive from that of the base noun *ftçaka*
 26075 ‘manner’, but rather from the collocation *ftçaka + βzu*, one of whose meanings
 26076 is ‘prepare’ (§24.6.3.1, Jacques 2016a: 240). The semantic near-identity between
 26077 *syftçaka* and *ftçaka + βzu* is illustrated by the examples (31) and (32). Other deno-
 26078 minal verbs derived from *ftçaka* have the same meaning ‘prepare’ §20.4.3.

- 26079 (31) *u-ndzxts^hi nuu kuu-muu~muum zo tu-syftcake q^he*
 3SG.POSS-meal DEM SBJ:PCP-EMPH~be.tasty EMPH IPFV-prepare[III] LNK
 26080 ‘She would (each time) prepare a meal (for the old woman).’ (2014-kWLAG,
 26081 616)
- 26082 (32) *ji-ndzxts^hi ftçaka tx-βze*
 1PL.POSS-meal manner IMP-make[III]
 26083 ‘Prepare a meal for us!’ (meimeidegushi, 67)

26084 The *sy-* denominational derivation is productive, as shown by the presence of sev-
 26085 eral words of Tibetan origin in Table 20.5, including *txçrt* ‘comb’, *fsay* ‘fumigation’,
 26086 *ts^has* ‘sieve’, *ts^hwi* ‘dye’ and *ftçaka* ‘manner’ from རྩྚ ཁ୍ୱ ‘comb’, རྩྚ བ୍ୟ ‘fumi-
 26087 gation’, ཁ୍ୱ བ୍ୟ ‘sieve’, ཁ୍ୱ བ୍ୟ ‘dye’ and ད୍ୱ བ୍ୟ ‘tool’, respectively.

26088 Unlike other denominational prefixes such as *mu-/ny-*, which can be paired with
 26089 other prefixes (§20.7.3), verbs derived by the *su(y)-sy-* generally don’t appear in

sets. The groups of denomininal verbs including a transitive *sV-* prefix are all different from each other. There is one case of *sr-*/*yr-*/*nr-* contrast between *srkʰu* ‘smoke’ (by directing smoke towards), ‘burn into smoke’ (see 29 above) and the intransitive verbs *yrkʰu* ‘have smoke’ with the *yr-* prefix (example 44, §20.5) and *nrkʰu* ‘be smoked’ (§20.7.1). Another group of denomininal verbs comprising *srftçaka* ‘prepare’ with a contrast between *sr-*, *ru-* and *nu-* is discussed in §20.4.3.

The verb *srmi* ‘name someone’ (§14.4.4) could be analyzed as an irregular causative of *rmi* ‘be called’ (§17.2.2.7), but the vocalism of the prefix is better accounted for by analyzing it instead as a denomininal verb from the noun *tr-rmi* ‘name’, which may itself originates from the base verb *rmi* ‘be called’.

The historical relationship between the sigmatic causative and the denomininal *sui-* prefix is explored in more detail in §20.10.3. Another related derivation is that of the *sr-* transitive deideophonic verbs (§20.9.1).

20.4 Rhotic denomininal prefixes

The *ru-/ry-* prefix is among the most productive denomininal prefixes in Japhug, and has a wide range of meanings. Although not used in deideophonic derivations, it is used to borrow verbs and adjectives from Chinese (§20.11).

20.4.1 Intransitive denomininal verbs

The *ru-/ry-* denomininal prefix is mainly used to derive intransitive verbs, of which Table 20.6 provides a representative sample.

With the exception of adjectives from Chinese (§20.11), denomininal verbs in *ru-/ry-* are dynamic, and have three main meanings.

First, they can mean ‘produce/grow/get *X*’ when the base noun corresponds to a part of the referent designated by the subject of the denomininal verb (for instance *ryjwař* ‘grow leaves’ from *tr-jwař* ‘leaf’), or an excrescence/offspring growing out of it. The intransitive subjects of such verbs are typically plants, inanimate objects (including body parts), but also humans or animals with meanings such as ‘give birth to *X*’ (for instance *rryřit* ‘have a child’ from *tr-řjít* ‘offspring’).

These denomininal verbs have meanings similar to collocations involving several light verbs. For instance, *ryjwař* ‘grow leaves’ and *rymat* ‘grow fruits’ are synonymous with complex predicates comprising their base nouns *tr-jwař* ‘leaf’ and *u-mat* ‘fruit’ combined with the light verbs *lṛt* ‘release’ and *βzu* ‘make’, as shown in (33). Additional examples of denomininal verbs belonging to this category that are synonymous with complex predicates in *βzu* ‘make’ are discussed in §20.1.2.

Table 20.6: Intransitive denominal verbs in *ruu-/rr-*

Base noun	Denominal verb
<i>muuntor</i> ‘flower’	<i>rumuuntor</i> ‘bloom’
<i>kuaçnom</i> ‘ears’ (of corn)	<i>rukuaçnom</i> ‘shoot out into ears’
<i>qajuu</i> ‘worm’	<i>ruqajuu</i> ‘get worms’
<i>çom</i> ‘milk skin’	<i>rrçom</i> ‘form (of milk skin)’
<i>tx-jwaa</i> ‘leaf’	<i>rrjwaa</i> ‘grow leaves’
<i>uu-mat</i> ‘fruit’	<i>rrmat</i> ‘grow fruits’
<i>tx-spui</i> ‘pus’	<i>rrspui</i> ‘fester’, ‘have pus’
<i>uu-cryb</i> ‘pod’ (of beans)	<i>rrcryb</i> ‘grow pods’
<i>txrkä</i> ‘twins’	<i>rrrkä</i> ‘have twins’
<i>tx-puu</i> ‘young’ (of animal)	<i>rrpuu</i> ‘bear young’
<i>tx-rjit</i> ‘offspring’	<i>rrrjit</i> ‘have a child’
<i>kʰa</i> ‘house’	<i>rrkʰa</i> ‘build a house’
(<i>yzz-</i>) <i>zga</i> ‘honey’	<i>rrzga</i> ‘make honey’, ‘gather pollen’
<i>juli</i> ‘flute’	<i>rujuli</i> ‘play the flute’
<i>uu-stu</i> ‘truth, truly’	<i>rrstu</i> ‘be truthful’
<i>kʰramba</i> ‘lie’	<i>rukʰramba</i> ‘tell lies’
<i>kʰycyl</i> ‘chat’ (n)	<i>ruukʰycyl</i> ‘chat’, ‘have a talk’
<i>ndzrtyi</i> ‘meal’	<i>ruundzrtyi</i> ‘have a meal’
<i>jzyrt</i> ‘terrace’, ‘toilets’	<i>ruujzyrt</i> ‘go to the toilets’
<i>çonjuzu</i> ‘woodwork’	<i>ruuconjuzu</i> ‘do woodwork’
<i>qartsyß</i> ‘harvest’	<i>ruuqartsyß</i> ‘do harvesting’
<i>skyrwa</i> ‘circumambulation’	<i>ruskyyrwa</i> ‘do a circumambulation’
<i>çpun</i> ‘monk’	<i>rrçpun</i> ‘become a monk’
<i>ftçaka</i> ‘manner’	<i>ruuftçaka</i> ‘do preparation’
<i>tuu-çmi</i> ‘word’	<i>ruuçmi</i> ‘speak’
<i>tuu-jrok</i> ‘trace’	<i>rrjrok</i> ‘leaving traces’
<i>tusqa</i> ‘wheat gruel’	<i>ruutusqa</i> ‘eat wheat gruel’
<i>tufcyy</i> ‘pottery’	<i>rrfcyy</i> ‘do pottery’
<i>tukryz</i> ‘discussion’	<i>rrkryz</i> ‘discuss’
<i>tx-loz</i> ‘nest’	<i>rrloz</i> ‘make a nest’
<i>ta-ma</i> ‘work’ (n)	<i>rrma</i> ‘work’

- 26125 (33) *nuu* [u-*jwab* *nuu-lxt*] *tçendyre* [u-*mat* *nuu-βze*]
DEM 3SG.POSS-leaf IPFV-release LNK 3SG.POSS-fruit IPFV-make[III]
26126 ‘(The *Zanthoxylum*) makes leaves and grows fruits.’ (07-tCGom, 22)

26127 Second, a related meaning of the *ruu-/rr-* denominal prefix is ‘build X’, when
26128 the product of the action results from a volitional action and is separate from the
26129 body of the agent, encoded as intransitive subject. Denominal verbs of this type,
26130 such as *rryloz* ‘make a nest’ and *rrykʰa* ‘build a house’, systematically correspond to
26131 complex predicates with the verb *βzu* ‘make’, such as *kʰa+βzu* ‘build a house’ and
26132 *tx-loz+βzu* ‘make a nest’. These constructions select human or animal subjects.

26133 Third, when the base noun refers to an activity rather than an object, the mean-
26134 ing of the *ruu-/rr-* denominal verb is ‘do X, perform a X’. There are two types of
26135 complex predicates corresponding to this subtype of denominal verbs.

26136 On the one hand, as in the previous subtypes, verbs such as *rulkʰramba* ‘tell
26137 lies’ (from *kʰramba* ‘lie’) or *rrkryz* ‘discuss’ (from *tukrryž* ‘discussion’), *rustunmu*
26138 ‘marry’ (from *stunmu* ‘marriage’)⁷ are synonymous with constructions in *βzu*
26139 ‘make’, *kʰramba+βzu* and *tukrryž+βzu*, respectively.

26140 On the other hand, verbs such as *ruskrrwa* ‘do circumambulations’ (from *skrrwa*
26141 ‘circumambulation’) and *rujryxt* ‘go to the toilets’ (from *jryxt* ‘terrace’, ‘toilet’)
26142 instead correspond to collocations with the motion verb *ce* ‘go’ (§22.4.1.1).

26143 Third, in a few cases such as *rujuli* ‘play the flute’ (from *juli* ‘flute’), the meaning
26144 of the denominal derivation is ‘use X’, and the corresponding complex predicate
26145 selects the light verb *lxt* ‘release’ (*juli+lxt* ‘play the flute’, see 151, §15.1.5.8).

26146 Fourth, *ruu-/rr-* denominal verbs from nouns of profession can have the mean-
26147 ing ‘become X’, for instance in the case of *rrχpun* ‘become monk’ from *χpun*
26148 ‘monk’. The corresponding complex predicate involves the verb *ndo* ‘take’ (§22.4.2.4).
26149 Most nouns of this type however take the intransitive denominal *nuu-* to derive a
26150 verb with this meaning (§20.7.1).

26151 In addition to nouns, the *ruu-/rr-* denominal derivations also takes as input
26152 lexicalized nominalized verb forms. For example, the lexicalized participles *kuju*
26153 ‘right thing’ and *kumar* ‘bad thing’ (from the subject participles *ku-ju* ‘the one
26154 that is’ and *ku-mar* ‘the one that is not’, §16.1.1.7) take the *ruu-* denominal prefix to
26155 form the verbs *rukuruju* ‘do the right thing’, ‘take good care of one’s family’ and
26156 *rukuruju* ‘do bad things’, respectively.⁸ Another example is *rutusqa* ‘eat wheat
26157 gruel’, discussed in more details in §16.4.4 and §20.1.1.

⁷Tibetan loanwords are common in this category; the three base nouns in the examples given here come from ཁྲମ ཚା ‘liar’, ཁྲଗྚ ག୍ରୋଁ ‘discussion’ and ཁྲଗྚ ཆନ୍ତୋ ‘banquet’, respectively.

⁸The corresponding complex predicate selects the verb *nrm̥a* ‘do’, see 44 in §16.1.1.7.

26158 The *ru-/rr-* prefix also has a deadverbial function, as in the case of *ru_{blywur}*
 26159 ‘happen suddenly’ which comes from the adverb *blywur* ‘suddenly’ (itself bor-
 26160 rowed from *glo.bur* ‘sudden’). This verb expresses an action taking place
 26161 spontaneously as in (34), as opposed to that expressed by the corresponding *nu-*
 26162 verb *nu_{blywur}* ‘do suddenly’ (§20.7.1).

- 26163 (34) *k^hyrum nuna_i, tu-mtc^{hi} ui-ta_b zmb_{yr}*
 mouth.ulcer DEM INDEF.POSS-mouth 3SG.POSS-on ulcer
 26164 *juu-kui-tor ju. tce wuma zo ru_{blywur}*
 IPFV-SBJ:PCP-come.out be:FACT LNK really EMPH DENOM-suddenly
 26165 ‘(The disease called) *k^hyrum* is an ulcer which appears on the mouth. It
 26166 happens very suddenly.’ (25-khArWm,1-2)

20.4.2 Transitive denominal verbs

26167 Transitive denominal verbs in *rr-* are also attested, but are considerably rarer.
 26168 Table 20.7 presents most attested examples.

Table 20.7: Transitive denominal verbs in *ru-/rr-*

Base noun	Denominal verb
<i>tu-tya</i> ‘one span’	<i>rrtya</i> ‘measure by handspan’
<i>tu-jom</i> ‘one fathom’	<i>rrjom</i> ‘measure by fathom’
<i>tu-ydryt</i> ‘one section’	<i>rrydryt</i> ‘cut into sections’
<i>tu-rzuy</i> ‘one section’, <i>tu-tirzuy</i> ‘one section’	<i>rrrzuy</i> ‘cut into sections’
<i>tu-spra</i> ‘one handful’	<i>rrspra</i> ‘take a handful of’
<i>uu-p^huu</i> ‘price’	<i>rrp^huu</i> ‘give a price for’
<i>uu-nqra</i> ‘broken one’	<i>rrnqra</i> ‘do in an incomplete way’

26170 Most transitive denominal verbs in *rr-* take counted nouns (§7.3) as input.
 26171 Three different meanings can be distinguished. First, *rr-* denominal verbs from
 26172 counted noun expressing units of lengths (see Table 7.11, §7.4) mean ‘measure by
 26173 X’, as in the case of *rrtya* ‘measure by handspan’ (35).

- 26174 (35) *t^hystuy kuu-ra nuu c^húr-wy-ry-tya*
 how.much SBJ:PCP-be.needed DEM IPFV:DOWNSTREAM-DENOM-handspace
 26175 ‘One measures how long (the clothes have to be weaved) by handspace.’
 26176 (vid-20140429092115, 25)

26177 Second, when the base noun has the meaning ‘(one) section’, the *ry-* denomininal
 26178 verb derived from it means ‘cut/turn into *X*’, like corresponding complex predi-
 26179 cates with either *lxt* ‘release’, *βzu* ‘make’ or the causative *suxce* ‘send’, ‘cause to
 26180 go’. Example (36) illustrates the parallel uses of the denomininal verb *r^hrzuy* ‘cut
 26181 into sections’ and the complex predicate *X-rzuy + lxt*. Emphatic reduplication on
 26182 the verb *pj^h-wy-ry-rzuy~rzuy* contributes to express the fact that the patient is cut
 26183 into more than two sections.

- 26184 (36) *pj^h-wy-ry-rzui~rzuy tce kuβde-rzuy zo tó-wy-lxt,*
 26185 IPFV-INV-DENOM-EMPH~section LNK four-section EMPH IFR-INV-release
pj^h-wy-sat.
 26186 IFR-INV-kill
 26187 ‘(The thieves) cut him into many sections, they cut him into four sections
 and killed him.’ (140512 alibaba-zh, 115)

26188 Third, in the case of the counted noun *tuu-spra* ‘one handful’ which refers to
 26189 the volume contained in a handful, the denomininal verb means ‘take a handful of’,
 26190 ‘hold in one hand’ as in (37).

- 26191 (37) *uu-juu, uu-sy-ndo [tuu-jab] kuu*
 26192 3SG.POSS-handle 3SG.POSS-OBL:PCP-take GENR.POSS-hand ERG
kú-wy-ry-spra kuu-k^huu] jamar myctsā
 26193 IPFV-INV-DENOM-handful SBJ:PCP-be.possible about until
c^hú-wy-βzob
 26194 IFR-INV-peel/sharpen
 26195 ‘One sharpens its handle until it can be held in one’s hand.’
 (13-tAsAsqAri, 27)

26196 There are two transitive denomininal verbs in *ry-* that are not derived from
 26197 counted nouns: *r^hy^huu* ‘give a price for’ from the inalienably possessed noun *uu-*
 26198 *p^huu* ‘price’ and *r^hynqra* ‘do in an incomplete way’ from the property noun *uu-nqra*
 26199 ‘broken one’ (§5.1.2.7). The former has the lexicalized reflexive *zy^hy^huu* ‘act ac-
 26200 cording to one’s ability’⁹ (probably through an intermediate meaning such as
 26201 ‘(correctly) evaluate one’s price’, §18.3.3).

⁹The meaning of this verb is close to that of the Chinese expression 量力而行 <liànglìérxíng> ‘act according to one’s ability’.

26202 20.4.3 Pairing with other denominal prefixes

26203 Intransitive denominal verbs with the *ruu-/rr-*- denominal prefix (§20.4.1) are often
 26204 paired with denominal verbs in *nuu-/nr-*. Several categories of *rV-/nV-* pairs have
 26205 to be distinguished.

Table 20.8: Pairs of denominal verbs in *ruu-/rr-* and *nuu-/nr-*

<i>ruu-/rr-</i> - denominal verbs	<i>nuu-/nr-</i> - denominal verbs
<i>rukuiçnom</i> ‘shoot out into ears’(vi)	<i>nukuiçnom</i> ‘collect ears’ (vi)
<i>ruuqajuu</i> ‘have worms’ (vi)	<i>nuuqajuu</i> ‘look for worms’ (vi)
<i>ruuftçaka</i> ‘do preparation’ (vi)	<i>nuuftçaka</i> ‘prepare’ (vt)
<i>rrkrzz</i> ‘have a discussion’ (vi)	<i>nuukrzz</i> ‘discuss’ (vt)
<i>rryma</i> ‘work’ (vi)	<i>nyyma</i> ‘do’ (a job) (vt)
<i>ruk^hyxjxwi</i> ‘have a meeting’ (vi)	<i>nuuk^hyxjxwi</i> ‘meet about’ (vt)

26206 There are pairs of intransitive verbs, such as *ruuqajuu* ‘have worms’ and *nuuqajuu*
 26207 ‘look for worms’ from *qajuu* ‘worm’, where the *rV-* verb means ‘produce/grow/get
 26208 *X*’ (§20.4.1), while the *nV-* verb rather has the meaning ‘look for/search/collect
 26209 *X*’ (§20.7.1).

26210 However, in most cases the *rV-* verb is intransitive and the *nV-* one is transitive.
 26211 For instance, *rryma* ‘work’ (38) has intransitive morphology (no stem II alterna-
 26212 tion), no overt object and its subject is in absolute form, while its counterpart
 26213 *nyyma* ‘do’ (a job) has stem III alternation and its subject is marked in the ergative
 26214 (39 and 40) (§14.3.1). The intransitive subject of the *rV-* denominal verb and the
 26215 transitive subject of the *nV-* encode the same referent.

- 26216 (38) *nuutcu a-wi c^ho a-mu ni*
 26217 DEM:LOC 1SG.POSS-grandmother COMIT 1SG.POSS-mother DU
tu-ry-ma-ndzi,
 26218 IPFV-DENOM:TR-work-DU
 ‘My grandmother and my mother were working there.’ (2010-09, 21)

26219 The additional object argument of the *nV-* verb which can be a noun phrase as
 26220 in (39), with a *figura etymologica* *uu-ma+nyyma* ‘do *X*’s work’ in (40).

- 26221 (39) *k^ha nuura pnu-nr-me.*
 26222 house DEM:PL SENS-DENOM:TR-work[III]
 ‘(Her daughter) does the housework.’ (14-siblings, 67)

- 26223 (40) *uزو kur rخلپو u-ما tu-ny-me*
 3SG.ERG king 3SG.POSS-work IPFV-DENOM:TR-work[III]
 26224 ‘He did the work of a king.’ (2003 qachGA, 194)

26225 In the case of other verbs pairs such as *rخkryz* ‘have a discussion’ and *nukryz*
 26226 ‘discuss’ (something), the object of the *nV-* verb is an infinitive complement clause,
 26227 as in (41). In some cases the transitive verb *nukryz* has the additional meaning
 26228 ‘discuss and decide that *X*’.

- 26229 (41) *khu c^hondyre mbro ni to-ry-kryz-ndzi.* [...]
 tiger COMIT horse DU IFR-DENOM:INTR-discussion-DU
 26230 *[tu-rjiti k^h-wy-nuisk^hruu tce, ui-puu nuu*
 GENR.POSS-offspring AOR-INV-be.pregnant.from LNK 3SG.POSS-child DEM
 26231 *tc^hi jamar tce tu-ky-sci nuu], to-nuu-kryz-ndzi.*
 what about LNK IPFV-INF-be.born DEM IFR-DENOM:TR-discussion-DU
 26232 ‘The tigress and the mare had a discussion, they discussed how long it
 26233 would take for the child to be born after one gets pregnant.’ (20-tArka, 34)

26234 The relationship between the *rV-* and the *nV-* verbs is functionally similar to
 26235 a base verb and its applicative counterpart, or to an antipassive verb and its cor-
 26236 responding base verb (§18.6.8.5, §20.7.3). The high degree of productivity of this
 26237 type of denomininal pair is shown by the presence not only of Tibetan loanwords
 26238 among the examples, but also of loanwords from Chinese such as *ruk^hyxwi* ‘have
 26239 a meeting’ and *nuk^hyxwi* ‘meet about’ (from 开会 <kāihui> ‘have a meeting’,
 26240 §20.11).

26241 The semantics of the verbs *nuftçaka* ‘do preparation’ and *muftçaka* ‘prepare’,
 26242 like that of *sxftçaka* ‘prepare’ (§20.3.2), derives from the collocation *ftçaka+βzu*
 26243 ‘prepare *X*, prepare to *X*’ (the other meanings of this collocation are discussed in
 26244 Jacques 2016a: 240, §16.2.1.5 and §16.2.1.2) rather than from the noun *ftçaka* ‘man-
 26245 ner’ itself. Both *nuftçaka* and *ftçaka+βzu* can occur with infinitival complement
 26246 clauses (42) or nouns (32 in §20.3.2) as objects. The intransitive *ruftçaka* occurs
 26247 as the functional antipassive counterpart of both *nuftçaka* and *sxftçaka*.

- 26248 (42) *li ky-tyβ kú-wy-nuu-ftcaka ra [...]*
 again INF-thresh IPFV-INV-DENOM-manner be.needed:FACT
 26249 *tx-tciu ra kuu tcendyre ky-tyβ ftcaka tú-wy-βzu tce,*
 INDEF.POSS-boy PL ERG LNK INF-thresh manner IPFV-INV-make LNK
 26250 ‘(After...), one has to prepare the threshing, the men prepare to thresh
 26251 (the crops).’ (2010-10, 101-102)

20.5 Velar denominal prefixes

The *yv-* denominal prefix (and its rarer variant *yuu-*) has a considerable variety of meanings, and can be used to derive both transitive and intransitive verbs. It is commonly paired with *nu-/nv-* (§20.5.3). In addition, it is among the denominal prefixes used to borrow adjectives from Chinese (§20.11) and to build incorporating verbs (§20.13).

20.5.1 Intransitive denominal verbs

The *yv-* prefix can derive several types of intransitive verbs, of which Table 20.9 lists a representative sample.

Table 20.9: Intransitive denominal verbs in *yuu-/yv-*

Base noun	Denominal verb
<i>rdul</i> ‘dust’	<i>yvrdul</i> ‘be dusty’
<i>tvcov</i> ‘mud’	<i>yvtcov</i> ‘be muddy’
<i>tvmbyo</i> ‘deaf person’	<i>yvmbyo</i> ‘be deaf’
<i>tvndzo</i> ‘cold’ (weather)	<i>yvndzo</i> ‘be cold’ (of weather)
<i>tv̥cu</i> ‘coolness’	<i>yv̥cu</i> ‘be cool’ (of a place)
<i>w-bre</i> ‘authority’	<i>yvb're</i> ‘be respected’ (of a person)
<i>w-jlu</i> ‘uncooked’	<i>yvjlu</i> ‘be uncooked’
<i>tv̥-di</i> ‘smell’ (n)	<i>yvdi</i> ‘have a smell’, ‘stink’
<i>tv̥-mdzu</i> ‘thorn’	<i>yvmdzu</i> ‘have thorns’
<i>tv̥-t̥cuy</i> ‘tree shoot’	<i>yvt̥cuy</i> ‘grow shoots’ (of trees)
<i>tuv-t̥ca</i> ‘mistake’	<i>yvt̥ca</i> ‘be wrong’
<i>tv̥-kʰu</i> ‘smoke’	<i>yvkʰu</i> ‘be smoky’
<i>tv̥-tsur</i> ‘crack’	<i>yvtsur</i> ‘have cracks’, ‘develop cracks’
<i>tv̥wu</i> ‘cry’ (n)	<i>yvwu</i> ‘cry’ (vi)
<i>tv̥vba</i> ‘game’ (n)	<i>yvtvba</i> ‘hunt’ (vi)
<i>çont̥ca</i> ‘timber’	<i>yuuçont̥ca</i> ‘chop timber’

Some *yv-* denominal verbs are stative proprietive, like those in *ayu-* (§20.2.4), such as *yvtcov* ‘be muddy’ from *tvcov* ‘mud’. The base nouns can be inalienably possessed nouns, nouns with a frozen *tv̥-* prefix, alienably possessed nouns (such as *rdul* ‘dust’) and also property nouns (such as *w-jlu* ‘uncooked’, §5.3). The only

example of a Tibetan loanword among these nouns is *rdul* ‘dust’ (from 藏文 *rdul* ‘dust’). Unlike *ayu-*, the *y-* prefix can derive verbs from abstract nouns, such as *yndzo* ‘be cold’ from *tnyndzo* ‘cold weather’.

Different nouns belonging to the same semantic categories do not necessarily select the same denomininal prefix. For instance, the inalienably possessed noun *w-duχun* ‘fragrance’ is the base for the denomininal verb *ayuduχun* ‘be fragrant’ with the *ayu-* prefix, while the noun *tr-di* ‘smell’ (from which *w-duχun* ‘fragrance’ is derived) takes the *y-* denomininal prefix (*yrdi* ‘have a smell’, ‘stink’). Similarly, while most denomininal verbs expressing physical defects are built with the *a-* prefix (§20.2.1), the verb *yrmbyo* ‘be deaf’ (from *trmbyo* ‘deaf person’) has the *y-* prefix.

The meaning of the *y-* prefix is slightly different from that of *ayu-*. Some nouns can take both prefixes, such as *tr-mdzu* ‘thorn’, which is the base for two denomininal verbs: *ayumdzu* ‘have a lot of thorns’ (see the Japhug definition of this verb in 11, §20.2.4) and *yymdzu* ‘have thorns’.

The *ayu-* denomininal prefix indicates the presence of an important quantity of the substance or entity referred to by the base noun (‘have a lot of *X*’ or ‘produce a lot of *X*’), while *y-* prefix rather can be simply glossed as ‘have *X*’, without specification of quantity, as shown by the definition in (43).

- 26284 (43) *jnu-y-**mdzu* *tce tr-**mdzu* *y-**zru* *k-**ti*
 SENS-DENOM:PROP-thorn LNK INDEF.POSS-thorn exist:SENS OBJ:PCP-say
 26285 *jnu* *ma* *kui-dyn* *mr-kui-dyn* *nura* *ma*
 be:FACT LNK SBJ:PCP-be.a.lot NEG-SBJ:PCP-be.a.lot DEM:PL not.be:FACT
 26286 ‘(The word) *jnu-y-**mdzu* means ‘it has thorns’, it does not (specify
 26287 whether) there are many or not.’ (elicited)

Another meaning of the *y-* prefix is ‘from which *X* comes out, emitting *X*'. For instance *yrdul* ‘be dusty’ has the specific meaning ‘emitting dust’ (of a dusty road) rather than ‘be covered in dust’ (see §20.5.3). The verb *yk^hu* (from *tr-k^hu* ‘smoke’) has two different meanings: ‘be smoky’ (of a place) or ‘have smoke coming out’ (44).

- 26293 (44) *k^ha* *jnu-y-**k^hu-nu*
 house SENS-DENOM-smoke-PL
 26294 ‘There is smoke coming out from their house.’ (Norbzang 2012, 227)

Among these verbs, *yrtca* ‘be wrong’ is one of the few intransitive verbs that can be reflexivized with the *zy-* prefix (§18.3.1.4), with a reflexive tropative meaning *zyyrtca* ‘recognize one’s mistake’.

Some *yr-* denominal verbs are clearly dynamic verbs. For instance, the denominational *yrtsur* ‘have cracks’ (45a) has the same meaning as the collocation combining the base noun *tr-tsür* ‘crack’ with the verb *ce* ‘go’ (45b).

- (45) a. *ui-rnom-cyru* *lo-yr-tsür*
 3SG.POSS-rib-bone IFR:UPSTREAM-DENOM-crack
 b. *ui-rnom-cyru* *yuu ui-tsür* *lo-ce*
 3SG.POSS-rib-bone GEN 3SG.POSS-crack IFR:UPSTREAM-go
 ‘His ribs got fractured.’ (elicited)

Some of the dynamic intransitive denominal verbs in *yr-* such as *yrtsur* ‘have cracks’ and *yrwu* ‘cry’ have patientive intransitive subjects, but a few other verbs such as *yutkaš* ‘hunt’ and *yucəŋtča* ‘chop timber’ have agentive subjects like the transitive denominal *yuu-/yr-* verbs treated in the following section.

The intransitive deideophonic *yr-* prefix (§20.9.1) is probably historically related to the *yr-* intransitive denominal prefix.

20.5.2 Transitive denominal verbs

The *yuu-/yr-* prefix can also derive transitive verbs, either from inalienably possessed nouns or counted nouns (see Table 20.9). The correlation between the vocalism of the indefinite possessor prefix *tuu-/tr-* and that of the denominal prefix *yuu-/yr-* is less consistent than for other derivations.

The verb *yxxpra* ‘send’ has the unique allomorph *yxx-* with an intrusive velar fricative *-x-* like some voice derivations (§17.2.1.4), even though this is not found in the base noun *trpra* ‘messenger’ and the other denominal verb *nypra* ‘be sent’ (§20.5.3).

When the base noun refers to a concrete object, the corresponding *yuu-/yr-* denominal verb expresses the action prototypically associated with the use of that object, for instance *yuri* ‘thread’ (pass a thread through beads/a needle’s eye) from *tr-ri* ‘thread’.

Denominal verbs in *yuu-/yr-* have meanings that are close to those of highly lexically-specific noun-verb collocations, and the correspondences between the argument structures of the denominal verbs and those of the corresponding collocations are not uniform.

For instance, the verb *yutčʰa* ‘answer’ is semantically close to the complex predicate involving the base noun *tuu-tčʰa* ‘information, news’ and the ditransitive verb *kʰo* ‘give’, and the recipient (person who receives an answer to his message) is encoded as the possessor of the inalienably possessed noun *tuu-tčʰa* in

Table 20.10: Intransitive denominal verbs in *yuu-/yr-*

Base noun	Denominal verb
<i>tr-ri</i> ‘thread’ (n)	<i>yuri</i> ‘thread’ (vt) (beads, needle)
<i>tr-fkum</i> ‘bag’	<i>yufkum</i> ‘put in a bag’
<i>trjtsi</i> ‘pillar’, ‘post’	<i>yujtsi</i> ‘support’ (as a pillar supporting the roof)
<i>tui-lyn</i> ‘answer’ (n)	<i>yulyn</i> ‘answer’ (vt)
<i>tui-tçʰa</i> ‘news’	<i>yutçʰa</i> ‘answer’ (vt) (to someone)
<i>tui-scur</i> ‘a double handful’	<i>yuscur</i> ‘hold with both hands’
<i>tui-çkat</i> ‘one load’	<i>yuiçkat</i> ‘load’ (a burden on an animal)
<i>tui-jmjo</i> ‘dream’ (n)	<i>yxjmjo</i> ‘dream of’
<i>trpra</i> ‘messenger’, ‘envoy’	<i>yxprä</i> ‘send’ (someone)
<i>w-trjuu</i> ‘addition’ (§25.6.2.3)	<i>yxjuu</i> ‘add’
<i>tr-ro</i> ‘excess’, ‘surplus’	<i>yxro</i> ‘add’, ‘do/give more’

the collocation (49, §5.1.2.13), and as direct object of the denominal *yutçʰa*. However, the possessor of the base noun does not necessarily always correspond to the object of the *yuu-/yr-*-denominal verb. For example, in the case of the transitive verb *yxjmjo* ‘dream of’ and its near-synonymous collocation *tui-jmjo + ntçʰyr* ‘appear in X’s dream’ (from *tui-jmjo* ‘dream’ with the intransitive verb *ntçʰyr* ‘appear’), the possessor of the base noun *tui-jmjo* encodes the experiencer (the person dreaming), corresponding to the *transitive subject* of *yxjmjo* as in (46).

- (46) [azo [...] qarts^{hi} p_r-k-ypa-a-ci] *pui-yx-jmjo-t-a*
 1SG cricket IFR-PEG-become-1SG-PEG AOR-DENOM-dream-PST:TR-1SG
 ‘I dreamt that I had become a cricket.’ (150904 cuzhi-zh, 193)

Some transitive *yuu-*-denominal verbs can be subjected to the *a-* passive derivation (§18.1). The resulting verbs, for instance *ayuçkat* ‘be loaded with’ (47), superficially resemble *ayuu-*-proprietary denominal verbs (§20.2.4), and it is possible that the *ayuu-* derivation originates from a combination of the passive with the transitive denominal *yuu-*.

- (47) *ki* *tryrka ki* *tr-ryku* *a-yuu-çkat*
 DEM.PROX mule DEM.PROX INDEF.POSS-crop PASS-DENOM-LOAD:FACT
 ‘This mule has been loaded with (burdens containing) crops.’ (elicited)

The *yv-/yu-* denominal prefix is cognate with Tshobdun *wv-*, for instance *wv-ri?* ‘thread a needle’ from *ri?* ‘thread’, (Sun 2014a), which exactly corresponds to Japhug *yuri* ‘thread’.

20.5.3 Pairing with other denominal prefixes

A considerable number of nouns can take both *yv-/yv-* and *nv-/nv-* denominal prefixes. Table 20.11 presents a list of pairs of denominal verbs derived with these prefixes; the base nouns are not included in this table for lack of space, but are indicated in Tables 20.9 and 20.10 above.

These pairs can be classified into three groups, depending on the transitivity of the verbs and the semantic correspondences between them.

Table 20.11: Pairs of denominal verbs in *yv-/yv-* and *nv-/nv-*

<i>yv-/yv-</i> denominal verbs	<i>nv-/nv-</i> denominal verbs
<i>yvndzo</i> ‘be cold’ (of weather) (vi)	<i>nvndzo</i> ‘feel cold’ (vi)
<i>yvcu</i> ‘be cool’, ‘be shady’ (vi)	<i>nvvcu</i> ‘cool off’ (vi) (in the shades)
<i>yvk'w</i> ‘have smoke’ (vi)	<i>nvk'w</i> ‘be smoked’ (vi)
<i>yvrdul</i> ‘be dusty’ (vi) ‘emit dust’	<i>nurdul</i> ‘be dusty’ (vi) ‘becovered in dust’
<i>yvwu</i> ‘cry’ (vi)	<i>nvwu</i> ‘cry for’ (vt)
<i>yvras</i> ‘hunt’ (vi)	<i>nvras</i> ‘hunt for’ (vt)
<i>yvxpra</i> ‘send’ (vt)	<i>nvpra</i> ‘be sent’ (vi)
<i>yvjmjo</i> ‘dream of’(vt)	<i>nujmjo</i> ‘appear in dream’ (vi)
<i>yvukat</i> ‘load’ (vt) (a burden on an animal)	<i>nukat</i> ‘carry loads’ (vi) (on animals)

First, we find pairs of intransitive verbs, where the *yv-/yv-* verb expresses either a property associated with a place ('have X', 'emitting X'), or with a dummy intransitive subject (*yvndzo* ‘be cold’), while the *nv-/nv-* denominal verbs takes as subject an experiencer (*nvndzo* ‘feel cold’).

In the case of the pair of intransitive verbs *yvrdul* and *nurdul* (from *rdul* ‘dust’) however, the subject of *nurdul* is not an experiencer, the semantic difference between the two verbs being explained in (48).

- 26364 (48) *kui-yr-rdul* *nui, uizo u-ta_b* *rdul*
 INF:STAT-DENOM-dust DEM 3SG 3SG.POSS-on dust
 26365 *tu-kui-to_b* *nui nyu, kui-nui-rdul* *nui, uizo*
 IPFV:UP-SBJ:PCP-come.out DEM be:FACT INF:STAT-DENOM-dust DEM 3SG
 26366 *u-ta_b* *rdul ky-kui-ndzob* *nui nyu*
 3SG.POSS-on dust AOR-SBJ:PCP-ACAUS:attach DEM be:FACT
 26367 ‘*kui-yr-rdul* means that dust is coming up from it, and *kui-nui-rdul* means
 26368 that dust is attached on it.’ (elicited definition)

26369 Second, there are cases in which the *yu-*/*yr-* denomininal verb is intransitive,
 26370 and the corresponding *nui-*/*ny-* verb is transitive, such as *yrwu* ‘cry’ and *nywu* ‘cry
 26371 for’. The transitive subject of the *nui-*/*ny-* verb corresponds to the same entity as
 26372 the intransitive subject of its counterpart in *yu-*/*yr-*, and has the same functional
 26373 relationship to it as an applicative derivation (§17.4) to its base verb, as the object
 26374 of the transitive verb in *nui-*/*ny-* expresses a patientive argument.

26375 Third, the opposite situation, with transitive denomininal verbs in *yu-*/*yr-* and
 26376 intransitive verbs in *nui-*/*ny-*, is also attested. These are passive-like configura-
 26377 tions, where the subject of the intransitive verb corresponds to the object of its
 26378 transitive counterpart (as in *yrrxpra* ‘send’ / *nypra* ‘be sent’), and antipassive-like
 26379 configurations, where the subjects of both verbs are the same (*yu_ckat* ‘load’ /
 26380 *nui_ckat* ‘carry loads’).

26381 20.6 Labial nasal denomininal prefixes

26382 The most common function of the *mr-* denomininal prefix to derive intransitive
 26383 verbs of relative location from locative relator nouns (§8.3.4.2), as illustrated in
 26384 Table 20.12. Note the presence of Tibetan loanwords in this list, including *u-pci*
 26385 ‘outside’ and *u-χcyl* ‘center’ from རྩ་*p^{hi}i* ‘outside’ and རྩ་*dk^{il}* ‘center’, a fact that
 26386 demonstrates the productivity of this derivation.¹⁰

26387 The *mr-* denomininal prefix is possibly related to the *maj-* prefix which derives
 26388 verbs of relative locations from locational adverbs, for instance *majlo* ‘be up-
 26389 stream’ from *lo* ‘upstream’ (§15.1.3.4).

26390 In addition to their semantic similarity, verbs of location in *mr-* and *maj-* have
 26391 in common the fact that they are among the very few intransitive verbs that can
 26392 be reflexivized (§18.3.1.4): *zyr-* prefixation yields volitional motion verbs such as
 26393 *zyrmyprrt^hγβ* ‘put oneself in between’ or *zyrmajlo* ‘put oneself upstream’, from
 26394 *mypyrrt^hγβ* ‘be between’ and *majlo* ‘be upstream’.

¹⁰The first syllable of *u-p^{rrt^h}*γβ ‘between’ is also borrowed from རྩ་*bar* ‘space between’.

Table 20.12: Denominal verbs of location in *my-*

Base noun	Denominal verb
<i>tu-ku</i> 'head', <i>wu-ku</i> 'top of'	<i>mryku</i> 'be first'
<i>wu-qʰu</i> 'after', 'behind'	<i>maqʰu</i> 'be after'
<i>wu-pči</i> 'outside'	<i>mrypči</i> 'be outside'
<i>wu-ŋgu</i> 'inside'	<i>mryŋgu</i> 'be inside'
<i>wu-χcyl</i> 'center'	<i>mryχcyl</i> 'be in the center'
<i>wu-pyrтʰyβ</i> 'between'	<i>mrypyrtʰyβ</i> 'be between'

The causativization of *mr*- denominal verbs has several outcomes. With *mrku* ‘be first’ and *maq^hu* ‘be after’, which can have temporal meanings (§7.1.5), the sigmatic causative forms *z-mrku* and *z-maq^hu* generally mean ‘do first’ or ‘do after/later’ with complement clauses as in (49) (see also examples 30, §17.2.4.6 and 204, §18.9.1).

- 26400 (49) *sulymgruβdyn kuw [u-t^hu] ty-tu-z-mvku-t*
 ANTHR ERG 3SG.POSS-BARE.INF:ask AOR-2-CAUS-be.first-PST:TR

26401 *ŋu tce*
 be:FACT LNK

26402 ‘Bsod.nam sgrub.ldan, you were the first to ask (her in marriage).’ (sras
 26403 2003, 103)

The causative *z-maq^hu* also has the straightforward causative meaning ‘cause to be late, delay’ (examples 51, §14.3.2.4 and 75, §14.3.3.1).

With other verbs, for which a temporal interpretation is not possible, the causative derivation means 'put in X', where X corresponds to the relator noun. For instance, *z-myngu* and *z-myrgci* occur in the sense of 'wear (some clothes) inside' and 'wear outside'. In addition, *z-myrgci* can be used in the metaphorical sense of 'treat as a stranger'.

In addition to generating verbs of relative location, the denominal *mu-* and *mr-* prefixes are also attested with other functions, illustrated by the examples in Table 20.13.

First, they derive stative intransitive verbs of quantity or size such as *mrlum* ‘be big in size’ from *tuu-lum* ‘size’. Most of the examples in this category are highly lexicalized: *musti* ‘be alone’ derives from the stem –*sti* ‘alone’ which is only used in the Kamnyu dialect in compounds with pronouns as first element (§22.2.2.4).

Table 20.13: Other denominational verbs in *mu-/mr-*

Base noun	Denominational verb
- <i>sti</i> ‘alone’	<i>musti</i> ‘be alone’
<i>tui-lum</i> ‘size’, ‘dimensions’	<i>mr̥lum</i> ‘be big in size’
<i>tx-mu</i> ‘mother’	<i>mr̥mu</i> ‘be the most important’
<i>tx-rzaβ</i> ‘wife’	<i>mr̥rzaβ</i> ‘marry’ (of a girl)
<i>tx-tçuu</i> ‘son’	<i>mr̥tçuu</i> ‘be adopted as a son’
<i>tui-rpaꝝ</i> ‘shoulder’	<i>mr̥rpaꝝ</i> ‘carry on the shoulder’

or as the reduplicated adverb *stusti* ‘alone’, and *mr̥mu* ‘be the most important’, is presumably derived from *tx-mu* ‘mother’, though not by a direct semantic change.

To these examples, it is possible to add *mr̥mbur* ‘protruding’, which probably comes from a lost noun **mbur* borrowed from Tibetan མྔ ར ས ག ‘bulge, protuberance’, and *muxte* ‘be the majority’, which may originate from the obsolete property noun **wu-te* ‘big’ (§5.7.4), though there is also the possibility of an isolated derivation from *wxti* ‘be big’ with ablaut (see for instance the form *-xte* in the compound noun *xtçuxte* ‘size’, §5.5.2.2 and §20.2.1 above).

Second, the *mr̥-* prefix is used to build intransitive verbs meaning ‘become someone’s *X*’ from kinship terms, as in *mr̥rzaβ* ‘marry’ (of a girl) and *mr̥tçuu* ‘be adopted as a son’¹¹ from *tx-rzaβ* ‘wife’ and *tx-tçuu* ‘son’, respectively.

Third, there is one transitive verb derived with the *mr̥-* prefix: *mr̥rpaꝝ* ‘carry on the shoulder’ from the inalienably possessed body part *tui-rpaꝝ* ‘shoulder’, anomalous both because of the vocalism of the denominational prefix (*mu-* is expected) and because of its isolated meaning, similar to the *nr̥-* denominational verb *nr̥rpaꝝ* ‘carry on the shoulder’ (§20.7.2).

20.7 Dental nasal denominational prefixes

The denominational prefixes *nu-/nr̥-* have a high degree of productivity, and present a wide range of functions. They can derive both intransitive and transitive verbs from nouns.

¹¹This verb has the additional meaning of Chinese 入赘 <rùzhùi> ‘marry into one’s wife’s household’.

20.7.1 Intransitive

Intransitive denominal derivations in *nu-/ny-* have at least six different meanings, illustrated in Table 20.14. All six categories contain examples of borrowings from Tibetan and even Chinese in some cases, such as *u-mdor* ‘colour’, *rdul* ‘dust’ and *χpunbu* ‘master’ from ཡོད་ *mdog* ‘colour’, རྩླུལ་ *rdul* ‘dust’ and བୋན་པོ་ *dpon.po* ‘lord’, respectively.

Table 20.14: Intransitive denominal verbs in *nu-*/ny-

Base noun	Denominal verb
<i>u-βzuiy</i> ‘appearance’	<i>nuibzuiy</i> ‘be pleasing to the eye’
<i>ta-mar</i> ‘butter’	<i>nymar</i> ‘be oily’
<i>u-mdor</i> ‘colour’	<i>numdor</i> ‘look like’
<i>sya</i> ‘rust’	<i>nusya</i> ‘become rusty’
<i>rdul</i> ‘dust’	<i>nurdul</i> ‘be dusty’ (be covered in dust)
<i>tuyur</i> ‘frost’	<i>nuyur</i> ‘suffer from frost’
<i>tr-kʰuu</i> ‘smoke’	<i>nrkʰuu</i> ‘be smoked’
<i>trzri</i> ‘dew’	<i>nrzri</i> ‘get wet from the dew’
<i>u-χcrl</i> ‘middle’	<i>nrxχcrl</i> ‘go to the middle’
<i>tumtçi</i> ‘morning’	<i>numtçi</i> ‘rise early’
<i>turmui</i> ‘evening’	<i>nurmui</i> ‘sleep late’
<i>rxyo</i> ‘song’	<i>nuryyo</i> ‘sing’
<i>tr-pyri</i> ‘dinner’	<i>nypyri</i> ‘have dinner’
<i>saxsu</i> ‘lunch’	<i>nusaxsu</i> ‘have lunch’
<i>tr-kaš</i> ‘good time’	<i>nrkaš</i> ‘have a good time’
<i>χpuunbu</i> ‘master’	<i>nuxχpuunbu</i> ‘become the master’
<i>mtaεmi</i> ‘soldier’	<i>nubmtaεmi</i> ‘become a soldier’, ‘serve in the army’
<i>qarma</i> ‘crossoptilon’	<i>nuqarma</i> ‘search for crossoptilon’
<i>mtsʰalu</i> ‘nettle’	<i>numtsʰalu</i> ‘search for nettle’
<i>qro</i> ‘ant’	<i>nuqro</i> ‘search for ants’
<i>txjmry</i> ‘mushrooms’	<i>nrjmr̥y</i> ‘search for mushrooms’

First, some denominal verbs in *nV-* are stative, including proprietive verbs like

26446 *mar* ‘producing a lot of butter’ with the *ayu-* prefix (§20.2.4). Borrowed Chinese
 26447 adjectives taking the *nu-* prefix (§20.11) also belong to this category.

26448 Among these stative verbs, *numdor* ‘look like’ from *u-mdor* ‘colour’ is semi-
 26449 transitive, as shown by (50), where its semi-object is the headless relative *u-sni*
 26450 *mr-kui-pas* ‘who is not evil (whose heart is not black)’.

- 26451 (50) <*maji*> *nunu* [*u-sni* *mr-kui-pas*]
 ANTHR DEM 3SG.POSS-heart NEG-SBJ:PCP-be.black
 26452 *pjx-nu-mdor*
 PST.IFR-DENOM-colour
 26453 ‘Ma Ji looked like someone who was not evil.’ (160702 luocha, 45)

26454 The ability of this verb to take a semi-object derives from the grammaticalized
 26455 use of *u-mdor* ‘colour’ as a complement-taking nominal predicate meaning
 26456 ‘it looks like...’ (§21.8.3.1). This is one of the few cases where the synthetic con-
 26457 struction corresponding to a denominational derivation is not a noun+verb complex
 26458 predicate (§20.1.2).

26459 Second, the *nu-/ny-* denominational derivation can mean ‘get (covered by) *X*, suffer
 26460 from *X*’, as in *nuyur* ‘be affected by frost’ (from *tuyur* ‘frost’). This verb selects
 26461 as subject plants (51), and differs from the corresponding light verb construction
 26462 *tuyur + ta* (52) (§22.4.2.6) whose transitive subject is dummy (§14.3.5).

- 26463 (51) *stonka tce li, nuki, pu-nu-yur q^he, li pjui-tsyi q^he*
 autumn LNK again FILLER AOR-DENOM-frost LNK again IPFV-rot LNK
 26464 *mu-nu-sna cti.*
 NEG-IPFV-be.good be.AFF:FACT
 26465 ‘In autumn, when (the *Arisaema consanguineum*) get frosted, it rots and
 26466 dies.’ (14-sWNgWJu, 179)

- 26467 (52) *tuyur pa-ta, kui-dyn zo mui-pa-ta.*
 frost AOR:3→3-put SBJ:PCP-be.many EMPH NEG-AOR:3→3-put
 26468 ‘There was a bit of frost, but not much.’ (conversation, 15-12-17)

26469 Third, the *nu-/ny-* denominational prefixes can also derive verbs of motion towards
 26470 a location, such as *nyχcyl* ‘go to the middle’ (from *u-χcyl* ‘middle’). These verbs
 26471 differ from the verbs of location derived with the *mr-* prefix such as *mrχcyl* ‘be in
 26472 the middle’, which express a static position without motion (Table 20.12, §20.6).

26473 Fourth, these prefixes can be used to build verbs describing an activity related
 26474 to the base noun. The denominational verbs can have the same meaning as a light verb

construction in *βzu* ‘make’, as in the case of *nuryyo* ‘sing’ (§15.1.5.8) and *rryo* + *βzu* ‘sing’. Alternatively, the corresponding complex predicate can be an existential construction (§22.4.1.3): compare the use of the denominal verb *nusaxsu* ‘have lunch’ in (53a) with that of the base noun *saxsu* ‘lunch’ combined with the existential verb *tu* ‘exist’ in (53b).

(53) a. *wi-tý-tui-nur-saxsu?*

QU-AOR-2-DENOM-lunch

b. *ny-saxsuw wi-púr-tu?*

3SG.POSS-lunch QU-PST.IPFV-exist

‘Did you have lunch?’ (both heard in context several times)

The *ru*-/*rr*- denominal prefix is more commonly used for these meanings (in examples such as *rundz̥tsʰi* ‘have a meal’ from *ndz̥tsʰi* ‘meal’, §20.4.1), and the choice between the nasal and the rhotic denominal prefixes is lexically determined.

Fifth, when the base noun expresses a profession or social status, the denominal verb in *nu*- means ‘become X’ (54a), synonymous with the light verb construction with *ndo* ‘take’ (§22.4.2.4) as in (54b).

(54) a. *jaŋm̥chuaqa ly-nui-xpuunbu*

ANTHR AOR:UPSTREAM-DENOM-master

‘Yagmakhyiqa became the master.’ (2003-kWBRA, 60)

b. *xpuunbu la-ndo*

master AOR:3→3:UPSTREAM-take

‘He became the master.’ (elicited)

The rhotic prefixes also appear in this function, though only on two nouns: *xpuun* ‘monk’ and *tç̥rm̥u* ‘nun’ (*rrxpuun* ‘become a monk’ and *nutç̥rm̥u* ‘become a nun’, §20.4.1). Using the *nui*- denominal prefix instead of the rhotic prefixes with these two nouns is not ungrammatical, but less unfelicitous.

The verb *murjor* from *bjor* ‘servant’ is labile, and means ‘work as a servant’ in intransitive use (see §14.5.1.4 and §20.7.2 for further discussion).

Sixth, when the base noun designates an animal or a plant, the *nui*-/*ny*- prefix most often means ‘search/look for/collect X-’. This highly productive function corresponds semantically to the combination with the verb *pʰut* ‘cut, pluck’ in the case of plants: in (55) for instance, the same action is redundantly referred to by the verb *numtsʰalu* ‘search for nettle’ and by *mtsʰalu* ‘nettle’ followed by *pʰut*.

- 26505 (55) *kua-nui-mts^halu*, *mts^halu u-kur-p^hut* *jo-yi*
 SBJ:PCP-DENOM-nettle nettle 3SG.POSS-SBJ:PCP-take.out IFR-come
 26506 'She came to collect nettle.' (140520 ye tiane, 365)

26507 When the base noun refers to animal, this denominal derivation has the same
 26508 meaning as the verb *tçrt* 'take out', 'extract' as shown by (56) where both con-
 26509 structions redundantly occur.

- 26510 (56) *lu-fsor* *cumgur tce tcendyre kua-nui-qafy* *ntsui ju-ce*
 IPFV-be.day before LNK LNK SBJ:PCP-DENOM-fish always IPFV-go
 26511 *pjy-ŋu.* *tcendyre qafy ntsui z-lu-tçrt*
 IFR.IPFV-be LNK fish always TRAL-IPFV:UPSTREAM-take.out
 26512 *pjy-ŋu* *tce,*
 IFR.IPFV-be LNK
 26513 '(The fisherman) always went fishing before daybreak.' (140512 yufu yu
 26514 mogui, 9-10)

26515 Like the rhotic prefix, the *nu-* denominal prefix also has a deadverbal function,
 26516 and occurs in *nušlwur* 'do suddenly' from *šlwur* 'suddenly' (compare with
 26517 *rušlwur* 'happen suddenly', §20.4.1).

26518 A possible irregular reduced allomorph *n-* of the intransitive denominal *nu-*
 26519 prefix is possibly found in the verb *ngo* 'be ill', which is derived from the inalien-
 26520 ably possessed noun *tu-ŋgo* 'disease': the group *ng-* represents /nŋg-/ phonolog-
 26521 ically (§4.2.1.9). This irregular allomorph appears to also be attested with some
 26522 transitive verbs (§20.7.2).

20.7.2 Transitive

26524 The *nu-/ny-* denominal prefix is also used to derive transitive verbs, with a con-
 26525 siderable variety of meanings, all with high productivity. In the following, in
 26526 order to clarify the glosses, X represents the base noun, and Y the object of the
 26527 corresponding transitive *nu-/ny-* denominal verb.

26528 First, transitive denominal verbs in *nu-/ny-* can have a tropative function
 26529 'treat/consider Y as X', as in the case of *nuŋgra* 'treat as an enemy' from *ŋgra*
 26530 'enemy'. The verb *nuŋjor* 'give orders to' (from 'treat as a servant') from *ŋjor*
 26531 'servant' is labile, and means 'work as a servant' when conjugated intransitively.
 26532 It is one of the very few verbs with ergative lability in Japhug (see §14.5.1.4).

26533 The opposite (anti-tropative) meaning 'be treated as X by Y' is found in *nyme*
 26534 'be adopted as a daughter' (from *tu-me* 'daughter': 'become Y's daughter'), the

Table 20.15: Transitive denominal verbs in *nū-*/*ny-*

Base noun	Denominal verb
<i>tr-pytso</i> ‘child’	<i>nūtṛpytso</i> ‘treat as a child’
<i>ɛgra</i> ‘enemy’	<i>nūɛgra</i> ‘treat as an enemy’, ‘be hostile to’
<i>tū-me</i> ‘daughter’	<i>nyme</i> ‘be adopted as daughter’
<i>smṛn</i> ‘medicine’	<i>nūsmṛn</i> ‘treat’, ‘heal’
<i>tū-rpaꝝ</i> ‘shoulder’	<i>nyṛpaꝝ</i> ‘carry on the shoulder’
<i>trtar</i> ‘stick’, ‘staff’, ‘rod’	<i>nytar</i> ‘hit with a stick’
<i>trji</i> ‘walking stick’	<i>nyji</i> ‘use as a walking stick’
<i>çrmuydu</i> ‘gun’	<i>nūçrmuydu</i> ‘shoot at’ (with a gun)
<i>tr-βju</i> ‘cushion’	<i>nyβju</i> ‘sit on’, ‘use as a cushion’
<i>tr-rme</i> ‘hair’	<i>nyrme</i> ‘remove the hair’
<i>tr-qɑ</i> ‘paw, root’	<i>nyqa</i> ‘uproot’
<i>tr-rqʰu</i> ‘hull, skin’	<i>nyrqʰu</i> ‘peel’
<i>tr-lu</i> ‘milk’	<i>nylu</i> ‘milk’ (a cow)
<i>tū-rdoꝝ</i> ‘one piece’	<i>nūrdoꝝ</i> ‘collect piece by piece’
<i>tr-mbru</i> ‘anger’	<i>nymbru</i> ‘get angry against’
<i>tr-re</i> ‘laugh’	<i>nyre</i> ‘laugh at’
<i>tr-sjut</i> ‘bite’	<i>nyṣjut</i> ‘gnaw’, ‘bite’
<i>trjkuꝝ</i> ‘secret’	<i>nyjkuꝝ</i> ‘conceal from’
<i>tū-mgla</i> ‘one step’	<i>nūmgla</i> ‘step over’, ‘cross’
<i>wi-qʰu</i> ‘after’	<i>nūnqʰu</i> ‘go along, follow’
<i>tū-skʰru</i> ‘body’	<i>nūskʰru</i> ‘be pregnant with’

transitive equivalent of the *mr-* derivation found in the intransitive verb *mr̥t̥cu* ‘be adopted as a son’ (from *tr̥-t̥c̥u* ‘son’, §20.6).

Second, the transitive *nu-/nr-* denominal has an instrumental function like the sigmatic denominal (§20.3.2). This function can be subdivided into two cases: ‘use X to do to Y’ as in *n̥tar* ‘hit with a stick’ (selecting the entity being hit as object) from *tr̥tar* ‘stick’ and ‘use Y as an X’ as in *n̥y̥pi* ‘use as a walking stick’ from *ty̥pi* ‘walking stick’ (selecting as object the implement used to replace a walking stick, as shown by 57).

- (57) *wi-rkɔntɔŋ* *numu ci* *to-ndo tce* *to-n̥y̥-ji* *tce*
 3SG.POSS-femur DEM INDEF IFR-take LNK IFR-DENOM-walking.stick LNK
 ‘He picked one of its femurs up and used it as a walking stick.’ (140511
 xinbada-zh, 71)

Third, when the base noun refers to the body part (or a substance coming from) of a plant or an animal, the denominal verb can mean ‘take the Y from the X’, the object X being the possessor of that body part. The meaning of this derivation is similar to that of the verbs *p̥ut* ‘cut, pluck’ and *t̥r̥t̥* ‘take out’ with the corresponding base nouns:¹² for instance, *n̥r̥me* ‘remove the hair’ (shear) expresses the same meaning as *tr̥-r̥me* ‘hair’ with *p̥ut* in example (58).

- (58) *nunja kui-fse*, *qazo kui-fse* *nura*
 cow SBJ:PCP-be.like sheep SBJ:PCP-be.like DEM:PL
c^hui-n̥y̥-r̥me *ŋgryl.* *numu*
 IPFV:DOWNSTREAM-DENOM:TR-hair be.usually.the.case:FACT DEM
ui-r̥me *c^hui-p̥ut* *ŋgryl* *ma,*
 3SG.POSS-hair IPFV:DOWNSTREAM-take.off be.usually.the.case:FACT LNK
 ‘(The bat) removes the hair of cows and sheep, it removes their hair.’
 (25-qarmWrwa, 17-18)

With the counted noun *tu-r̥dɔ̥s* ‘one piece’ (§7.3.2.2) the transitive denominal derivation yields the distributed action meaning *nurdo̥s* ‘pick up one by one’.

Fourth, when the base noun is an abstract noun, the transitive denominal in *nu-/nr-* expresses an action directed toward a patient or stimulus, as in *n̥y̥mbru* ‘get angry with’ (from *tr̥-mbru* ‘anger’, see also §20.3.1). Among these verbs, *n̥re* ‘laugh, laugh at, mock’ from the inalienably possessed noun *tr̥-re* ‘laugh’ is labile (§14.5.1.3).

¹²The same is true of the intransitive denominal verbs in *nu-/nr-* meaning ‘search/look for/collect X’ discussed above.

Fifth, denominal verbs in *nu-* can have idiosyncratic meanings associated with a noun+verb collocation. For instance *nuskʰru* ‘be pregnant with’ (41, §20.4.3) from *tuk-skʰru* ‘body’ derives from the collocation *tuk-skʰru + NEG + βdi* ‘be pregnant’ (§22.4.1.5), but it did not integrate the verbal root *βdi* ‘be well’ and the negative prefix.

Irregular allomorphs of the transitive denominal *nu-* prefix include the reduced form *n-* in *ntsye* ‘sell’ from *tutsye* ‘commerce’ (§20.10.1.1), and *nuN-* with an intrusive homorganic nasal in the transitive motion verb *nuŋqʰu* ‘go along, follow’ (§15.1.2.1) which derives from *u-qʰu* ‘after’.

20.7.3 Pairing with other denominal prefixes

The *nV-* denominal prefixes are most commonly paired with *rV-* prefixes (§20.4.3). When a transitive *nV-* denominal verb (§20.7.2) occurs in pair with an intransitive *rV-* verb (§20.4.1), for instance *nukryz* ‘discuss’ vs. *rskryz* ‘have a discussion’, the intransitive verb serves as the functional antipassive of the transitive one, and the *nV-* verb cannot take the antipassive *rs-* prefix (§18.6.8.5).

The *ny-* denominal prefix also derives dynamic verbs (both transitive and intransitive) paired with proprietive denominal verbs in *sɣ-* (§20.3.1).

These verbs are not compatible with the proprietive *sɣ-* derivation (§18.8): the corresponding stative *sɣ-* denominal is used instead. For instance, the transitive denominal verb *nyŋaβ* ‘consider to be unpleasant’, ‘be embarrassed by’ (from *trŋaβ* ‘unpleasant thing, wrong’) lacks a proprietive form such as *†sɣ-nyŋaβ*, and the denominal *sɣŋaβ* ‘be unpleasant’, ‘be embarrassing’ (21 in §20.3.1) is used instead.

Denominal verbs in *ny-* can however take the *sɣ-* antipassive prefix (§18.6.2), for example *sɣnŋre* ‘laugh at people’ from *nyre* ‘laugh’ (§14.5.1.3).

Some *sɣ-/ny-* denominal pairs have lost their base noun. For instance, there is no abstract noun *†trŋqa* in Kamnyu Japhug corresponding to the pair *sɣŋqa* ‘be bearable’/*nyŋqa* ‘endure’. Nevertheless, like synchronic denominal verbs such as *nyŋaβ* ‘consider to be unpleasant’, the transitive form in these pairs cannot undergo the proprietive derivation: the denominal *sɣŋqa* (59) is used instead of a putative form such as *†sɣ-nyŋqa*.

- (59) *a-χpum juu-mŋym ri, ny-kui-sɣŋqa mane*
 1SG.POSS-knee SENS-hurt LNK NEG-SBJ:PCP-be.bearable not.exist:SENS
 ‘My knee hurts, but nothing unbearable.’ (elicited)

Pairing with other denominal prefixes such as *yuu-/yr-* (§20.5.2) is also attested, but with less straightforward semantic correspondences between the two verbs.

20.8 Other denominal verbs

26600 20.8.1 Zero-derivation or backformation?

While there are non-finite verbs and deverbal nouns lacking any specific nominalization affix (bare infinitives §16.2.2 and bare action nominals §16.4.6), there is little evidence in Japhug for denominal zero-derivation.

Table 20.16 includes cases of noun-verb pairs in which the semantics of the verb is innovative: the nouns have the same meanings as those of their cognates in other Trans-Himalayan languages such as Chinese and Tibetan (for evidence that these nouns are not borrowed from Tibetan, see Jacques 2004: 162 and Hill 2014c), but there is no trace of the corresponding verbs outside of core Gyalrong languages.

Table 20.16: Verbs backformed from nouns in Japhug

Noun	Verb	Cognates
<i>ta-mar</i> ‘butter’	<i>mar</i> ‘smear’	မူရ <i>mar</i> ‘butter’
<i>tx-mkum</i> ‘pillow’	<i>mkum</i> ‘have one’s head turned towards’	枕 * <i>t.kəm?</i> → <i>tçimX</i> ‘pillow’
<i>txjpyom</i> ‘ice’	<i>jpyom</i> ‘freeze’	氷 * <i>rpaem</i> → <i>pɪŋ</i> ‘ice’
<i>ndzom</i> ‘bridge’	<i>ndzom</i> ‘form a layer of ice’	笮笮 <i>zam.pa</i> ‘bridge’

The inalienably possessed nouns *ta-mar* ‘butter’, *tx-mkum* ‘pillow’ and *txjpyom* ‘ice’ formally look like bare nominalizations (§16.4.2, §16.4.6) from the corresponding verbs. The etymological relationship between *ta-mar* ‘butter’ and *mar* ‘smear’, while not completely obvious, is supported by the existence of the *figura etymologica* in (60) and the typological parallel provided by the French denominational verb *beurrer* ‘smear’ (not necessarily butter) from *beurre* ‘butter’.

- 26616 (60) *ta-mar* *ɛja* *zo* *ku-mar-nu*
 INDEF.POSS-butter completely EMPH IPFV-smear-PL
 26617 ‘They smeared it completely with butter.’ (30-komar, 11)

The inalienably possessed noun *tx-mkum* ‘pillow’ is related to the rare orienting verb (§15.1.2.4) *mkum* ‘have one’s head turned towards X while lying in bed’, as in (61).

- 26621 (61) *ty-tceu* *nui, soz* *tce, ryru* *tyk^ha* *tce, tc^heme nur*
 INDEF.POSS-son DEM morning LOC get.up:FACT moment LOC girl DEM
 26622 *yui* [...] *ui-jme* *pco& nuietu* *ntsui*
 GEN 3SG.POSS-tail side DEM:LOC always
 26623 *c^hui-mkum* *pjy-ηu*
 IPFV:DOWNTSTREAM-head.towards IFR.IPFV-be
 26624 ‘The man, in the morning, when he was about to get up, had his head
 26625 towards the tail of the woman.’ (rkoNrJAl2002, 15)

26626 In both cases, the cognates in Chinese and Tibetan suggest that the verbs in
 26627 Japhug are secondary. I propose that rather than being cases of denominal zero-
 26628 derivation, these verbs were back-formed from the nouns on the model of bare
 26629 nominalizations.

26630 The case of the verb *ndzom* ‘form a bridge of ice (over a body of water)’ (62)
 26631 is more puzzling, since the noun *ndzom* ‘bridge’ from which this verb originates
 26632 is alienably possessed and does not have a frozen *ty-* prefix. There is no model
 26633 from which this verb could have been backformed.

- 26634 (62) *tui-ci* *ko-ndzom*
 INDEF.POSS-water IFR-form.a.bridge.of.ice
 26635 ‘A bridge of ice formed over the river.’ (elicited)

26636 A possible scenario for the backformation hypothesis is that a *nu-* denominal
 26637 verb (§20.7) was first derived from the base noun, and its *nu-* prefix was then rein-
 26638 terpreted as an autative prefix (§19.1).¹³ As a consequence of this backformation, a
 26639 prefixless verb, whose stem is identical to that of the base noun, was created,
 26640 following the pathway in (63).

- 26641 (63) *ndzom* ⇒ **nui-ndzom* ⇒ **nui-ndzom* ⇒ *ndzom*
 bridge ⇒ *DENOM-bridge ⇒ *AUTO-form.a.bridge ⇒ form.a.bridge

26642 A synchronic example of ongoing reanalysis of the *nu-* denominal prefix as an
 26643 autative prefix is provided by the transitive verb *numgla* ‘step over’, ‘cross’, which
 26644 derives from the counted noun *tui-mgla* ‘one step’. An anomalous form *ja-mgla*
 26645 (64) without the *nu-* prefix is found in the corpus, and can be explained as having
 26646 been backformed from *ja-nui-mgla* (see 20, §15.1.2.1, with a similar context) by this
 26647 mechanism.

¹³Both the spontaneous (§19.1.4) and the permansive (§19.1.5) functions of the autative would be compatible with the meaning of the verb *ndzom* ‘form a bridge of ice’.

- 26648 (64) *rirvβ tʰystury ja-pyab, tur-ci tʰystury*
 mountain how.many AOR:3→3'-cross INDEF.POSS-water how.many
 26649 *ja-mcla my-xsi ma,*
 AOR:3→3'-step.over NEG-GENR:know LNK
 26650 'It is not now how many mountains and rivers he crossed.' (160706
 26651 poucet6, 48)

20.8.2 Vowel alternation

26653 The inalienably possessed noun *u-fsu* 'of the same size', used in one of the equa-
 26654 tive constructions (§26.3.1.3, §5.1.1.5, Jacques 2018d), is etymologically related to
 26655 the stative verb *fse* 'be like'. This *u* / *e* alternation, which is similar to that of Stem
 26656 III (§12.2.2.1) and a few other isolated examples (§19.7.12), is possibly due to a *-j
 26657 suffix.

20.9 Deideophonic verbs

26658 In addition to nouns (and some adverbs such as *ɛlywur* 'suddenly', §20.4.1), some
 26659 verbalizing prefixes can take ideophones as input.

20.9.1 *yv-* and *sv-* deideophonic verbs

26660 The most productive deideophonic prefixes are *yv-* and *sv-*. Verbs derived with
 26661 these prefixes can be built from most (though not all) ideophonic roots, either
 26662 from the reduplicated root (type I) or from a root with partial reduplication in *l-*
 26663 (type II).

26664 Type I deideophonic verbs can be illustrated by the intransitive verb *yvplasplas*
 26665 'flick, extend and retract' (of a snake's tongue) (65a) and its transitive counterpart
 26666 *svplasplas* (65b).

- 26667 (65) a. *qapri yu u-mdzu juu-yv-plasplas zo*
 26668 snake GEN 3SG.POSS-tongue SENS-DEIPH:INTR-flicking EMPH
 26669 'The snake's tongue is flicking.' (elicited)
 26670 b. *qapri ku u-mdzu juu-sv-plasplas zo*
 26671 snake ERG 3SG.POSS-tongue SENS-DEIPH:TR-flicking EMPH
 26672 'The snake is flicking its tongue.' (elicited)

26673 Despite the fact that the reduplicated root *-plasplas* in these verbs resembles
 26674 the type II ideophonic pattern (which has a stative meaning, §10.1.2.2), its mean-
 26675 ing corresponds to that of the type III pattern 'dynamic action' ideophone, namely

26676 *plasnyplas* ‘flickering’ (§10.1.2.3).¹⁴ Compare (65b) with the corresponding light
 26677 verb construction (66), which uses the similative verb *stu* ‘do like’ (§10.1.7.3). In
 26678 this particular case, the deideophonic verb in (65b) expresses a faster motion than
 26679 the construction in (66), but this semantic difference is not generalizable to all
 26680 deideophonic verbs.

- 26681 (66) *qapri kuu u-mdzu plasnyplas zo nuu-vsuu-stu*
 snake ERG 3SG.POSS-tongue IDPH(III):flickering EMPH SENS-PROG-do.like
 26682 ‘The snake is flicking its tongue.’ (elicited)

26683 As a general rule, type I verbs in *yr-* and *sr-* have a meaning that corresponds to
 26684 that of the type III ideophone based on the same root. They differ from each other
 26685 in that the prefix *yr-* builds intransitive verbs, whose synthetic counterpart is a
 26686 light verb construction with an intransitive verb such as *zysstu* ‘act like’ (§10.1.7.3),
 26687 whereas *sr-* derives transitive verbs with a causative meaning ‘make X do/be’ like
 26688 the construction with *stu* ‘do like’ (66).

26689 Type II deideophonic verbs have partial reduplication of the ideophonic root
 26690 in *l-*, and semantically correspond to pattern IV (§10.1.2.4), expressing spatially
 26691 distributed action (note that the distributed action derivation also presents the
 26692 *l-* reduplication, §19.4). Most ideophonic roots either derive type I or type II dei-
 26693 deophonic verbs. For instance, there is no verb *tyr-plas-las* from the root *-plas*
 26694 discussed above (the verb in 65a is *yr-plas-plas*), and the type II deideophonic
 26695 verb *yrcetsarlar* ‘balance’ from *-ctsar* has no correspond type I verb *tyrcetsarjctsar*
 26696 despite the fact that a type III pattern ideophone *ctsajnyrcctsaj* ‘balancing’ does
 26697 exist.

26698 An example of an ideophonic root allowing four deideophonic patterns is *-juuy*.
 26699 The type I verbs *yjuuyjuuy* (vi) and *sjuuyjuuy* (vt), like the corresponding ideophone
 26700 *juuynujuuy*, mean ‘shake’, while the type II verb *yjuuyluuy* (vi) and *sjuuyluuy* (vt)
 26701 instead mean ‘wiggle, squirm, creep’, expressing a great number of individuals
 26702 and/or motion in all directions; these verbs are particularly appropriate to refer
 26703 to insects, snakes or fishes (see for instance 67), but can also be applied to describe
 26704 a crowd of people.

- 26705 (67) *tce qapri qacpa [...] pjy-yys-juuyluuy zo cti*
 LNK snake frog IPFV.IFR-DEIDPH:INTR-wiggling EMPH be.AFF:FACT
 26706 ‘There were (many) snakes and frogs wiggling (everywhere).’ (2003
 26707 kWBRa, 119)

¹⁴The type II pattern *plasplas* of the ideophonic root *-plas* has a entirely unrelated meaning: ‘completely white’.

This meaning can also be conveyed by the type IV ideophone *juynrlyuy* 'wig-gling'.

The deideophonic functions of *yṛ-* and *sṛ-* are certainly related to their denominal function. The prefix *yṛ-* is also used to derive dynamic intransitive verbs such as *yṛwū* ‘cry’ (from *twū* ‘cry’ (n), §20.5.1), and the meaning of *sṛ-* as a deideo-
phonic prefix is reminiscent of the causative/instrumental function of sigmatic
denominal prefixes (§20.3.2).

26715 Tshobdun has cognate prefixes *wp-* and *sp-* with similar functions (Sun & Shi-
26716 danluo 2004; Sun 2014a).

26717 20.9.2 *nu-* deideophonic verbs

Deideophonic verbs in *nu-* are built on non-reduplicated ideophonic roots, but like the *yr-* and *sv-* prefixes (§20.9.1), they have a meaning based on that of type III pattern ‘dynamic action’ ideophones. The *nu-* derivation yields transitive verbs which differ from *sv-* deideophonic verbs in lacking a causative meaning. For instance, the verb *nuxur* ‘turn around’ (68) from the root *-xur* ‘turn’ expresses rotational motion of the subject (with a complex predicate involving the motion verb *skyrwa + œ* ‘make circambulations’, §22.4.1.1), like the type III ideophone *xurnyxur*, which occurs with the corresponding denominal verb *ru-skyrwa* ‘make circambulations’ (§20.4.1).

- 26727 (68) *skyrwa* *ky-nui-xur-a* *zo* *ky-ari-a*
 circumambulation AOR-DENOM-turn-1SG EMPH AOR-go[II]-1SG
 26728 'I made circumambulations (again and again).' (elicited)

26729 (69) *xurnyxur* *zo* *ky-ru-skyrwa-a*
 IDPH(III):turn EMPH AOR-DENOM-circumambulation-1SG
 26730 'I made circumambulations (again and again).' (elicited)

26731 By contrast, the corresponding transitive verb *srxurxur* ‘cause to turn’ (again
26732 and again, quickly) expresses induced motion of the object.

In some cases the *nu-* and *sx-* deideophonic verbs are very close semantically, as illustrated by *nuu-bvβ* (70a) and *sx-bvbxvβ* (70b). Both of these express the action of repeatedly throwing down heavy objects which make a loud noise when reaching the ground, with no care for safety. The difference between the two verbs is subtle, *sx-bvbxvβ* putting more focus on the speed and the quantity of objects.

- 26738 (70) a. *rđystas pa-nu-bvβ* zo *pa-βde*
 stone AOR:3→3-DEIDPH-heavy.object EMPH AOR:3→3:DOWN-throw

- 26739 b. *pa-sy-bvbyβ* *zo pa-βde*
 AOR:3→3-DEIDPH-heavy.object EMPH AOR:3→3:DOWN-throw

26740 c. *bvβnybvβ* *zo pa-βde*
 IDPH(III):heavy.object EMPH AOR:3→3:DOWN-throw

26741
 26742 ‘He threw (stones) down, going ‘boom’ (on the ground) again and again.’ (elicited)

26743 20.9.3 *a-* and *ny-* deideophonic verbs

26744 A few verbs in *a-* can be built from reduplicated ideophonic roots, with a mean-
26745 ing equivalent to the type II ideophonic pattern (§10.1.2.2). For instance, the ideo-
26746 phone *bɔrbɔr* ‘in a group, in a cluster’ (71) is the source of the intransitive verb
26747 *abɔrbɔr* ‘cluster around’, ‘huddle’.

- | | | | |
|--|------|---|------------------------------------|
| 26748 | (71) | <i>tce ncocna me, porxt me, ui-puu</i> | <i>tx-tu</i> |
| LNK big.spider whether small.spider whether 3SG.POSS-young AOR-exist | | | |
| 26749 | | <i>tce, kuiki icq^ha,</i> | <i>[...] ui-tas</i> |
| LNK DEM.PROX the.aforementioned 3SG.POSS-on DEM:LOC | | | |
| 26750 | | <i>bo^bbo^b zo ku-ndzo^b-nu</i> | <i>tce</i> |
| IDPH(II):in.group EMPH IPFV-ACAU:attach-PL LNK | | | |
| 26751 | | 'When spiders _i , whether big ones or small ones, have offspring _j , those _j | |
| 26752 | | attach in clusters on them _j .' (26-mYaRmtsaR, 118) | |
| 26753 | (72) | <i>k^huzvpuu ra nu-mu</i> | <i>ui-cki</i> |
| puppy PL 3PL.POSS-mother 3SG.POSS-DAT | | | |
| 26754 | | <i>ko-k-y-bo^bbo^b-nu-ci</i> | <i>ma nu-n^y-ndzo-nu</i> |
| IFR-PEG-DEIDPH-in.group-PL-PEG LNK SENS-DENOM-cold-PL | | | |
| 26755 | | 'The puppies huddled against their mother, as they feel cold.' (elicited) | |

Intransitive deideophonic verbs in *a-* pair with transitive verbs in *ny-* such as *nybovbov* ‘cluster around’. The subject of transitive *nybovbov* encodes the same semantic role as that of the intransitive subject of *abovbov*, while its direct object corresponds to the referent marked with the relator noun *u-taš* ‘on’ in the intransitive equivalent.

- 26761 (73) *kui-myci ra yuu, nur-tciu nura kui tcheme ci*
 SBJ:PCP-be.rich PL GEN 3PL.POSS-son DEM:PL ERG girl INDEF
 26762 *pju-k-yz-ny-bovbov-nu-ci*
 PST.IPFV-PEG-PROG-DEIDPH-in.group-PL-PEG
 26763 ‘Children from rich (families) were grouped around a girl.’ (160630)

26764 abao-zh, 87)

26765 It is possible to analyze *ny-* deideophonic verbs as applicative derivations (§17.4)
 26766 from *a-* deideophonic verbs with regular vowel fusion *nuu-γ-* → *ny-* (§17.4.2), pro-
 26767 moting oblique arguments in *u-tas* ‘on’ to object status.

26768 In addition to ideophones expressing ‘grouping, clustering’ like *boxbob*, the *a-*
 26769 derivation is also compatible with ideophones of shape like *alulju* ‘be cylindrical’
 26770 from *lulju* ‘cylindrical’. Such verbs do not have a *ny-* counterpart.

26771 20.10 The nominal origin of voice prefixes

26772 There is a remarkable similarity in Japhug between some valency-changing pre-
 26773 fixes on the one hand, and denomininal prefixes on the other hand, as illustrated by
 26774 Table 20.17. These correspondences suggest that a historical relationship exists
 26775 between these pairs of prefixes.

Table 20.17: Voice derivations and denomininal prefixes

Voice		Denomininal derivation	
Sigmatic causative	§17.2	Instrumental/ causative denomininal <i>su(y)-/sγ-</i>	§20.3.2
<i>su(y)-/z-</i>			
Applicative <i>nu(y)-</i>	§17.4	Transitive denomininal <i>nu-</i>	§20.7.2
Tropative <i>ny(y)-</i>	§17.5	Transitive denomininal <i>ny-</i>	§20.7.3
Passive <i>a-</i> ,	§18.1	Stative denomininal <i>a-</i>	§20.2.1
Reciprocal <i>a-</i>	§18.4.1		
Antipassive <i>rγ-</i>	§18.6.1	Intransitive denomininal <i>nu-/rγ-</i>	§20.4.1
Antipassive <i>sγ-</i>	§18.6.2	Proprietive denomininal <i>sγ-</i>	§20.3.1
Proprietive <i>sγ-</i>	§18.8	Proprietive denomininal <i>sγ-</i>	§20.3.1

26776 The resemblance between these two series of prefixes is not specific to Japhug,
 26777 and found in all Gyalrongic languages, in particular Khroskyabs (Lai 2017: 527).
 26778 The following sections (in particular §20.10.1) provide evidence that these resem-
 26779 blances are due to the fact that the derivations in Table 20.17 actually historically
 26780 originate from the corresponding denomininal derivations (see also Jacques 2014b;
 26781 2015d, Lai 2017: 527–529, Lai to appear).

26782 Not all valency-changing prefixes in Japhug are related to denomininal deriva-
 26783 tions: the reflexive *zyr-* in particular derives instead from the incorporation of the

26784 3SG pronoun (§18.3.7 and Jacques 2010b), and some derivations such as the autive
 26785 and anticausative are probably inherited from proto-Trans-Himalayan (§19.1.7,
 26786 §18.5, Sagart & Baxter 2012, Jacques 2015e).

26787 20.10.1 The origin of the *rr-* antipassive prefix

26788 The resemblance between the *rr-* applicative (§18.6.1) and the intransitive denominal *rr-* prefix (§20.4.1) suggests that a historical relationship between these
 26789 prefixes is possible. In addition, the fact that the antipassive only has cognates
 26790 in Tshobdun and Zbu (Sun 2006b; 2014a, Jacques forthcoming) makes it unlikely
 26791 that this derivation is very ancient.

26792 A few antipassive verbs have formal and semantic irregularities (§18.6.1). In
 26793 this section, I show that these irregularities are shared with corresponding action
 26794 nominals (§20.10.1.1, §20.10.1.2), and that this observation is a crucial piece of
 26795 evidence to propose that the antipassive prefix originates from the denominal
 26796 derivation of action nominals from transitive verbs (§20.10.1.4).

26798 20.10.1.1 Formal commonalities between antipassive verbs and action 26799 nominals

26800 Two antipassive verbs have irregularities in stem formation: *r_nnja* ‘have a debt’,
 26801 ‘owe money’ from *ŋa* ‘owe’ (money) has an intrusive *-n-* element between the
 26802 antipassive *rr-* prefix and the stem *-ŋa*, and *r_ntsye* ‘do business’ presents the op-
 26803 posite situation: the corresponding transitive verb *ntsye* ‘sell’ has an extra prefical
 26804 *n-* element (§18.6.1).

26805 These morphological specificities are not isolated: the action nominals *t_n-ŋja*
 26806 ‘debt’ (§16.4.6) and *tut_nye* ‘commerce’ (§16.4) have the same stem as the corre-
 26807 sponding antipassive verbs.

26808 This commonality between action nominals and the corresponding antipas-
 26809 sive verbs is explainable if one assumes that the latter derive from the former by
 26810 a denominal *rr-*, on the model of *r_kkryz* ‘discuss’ and *r_mma* ‘work’ from *tukr_vz*
 26811 ‘discussion’ or *ta-ma* ‘work’ (n) (§20.4.1), rather than directly from the corres-
 26812 ponding transitive verbs.

26813 The *n-* element in *t_n-ŋja* ‘debt’ may be analyzable as a nasalized dental nomi-
 26814 nalization prefix (**-t-ŋa* → *-nja*, §16.4.6), and the relationship between *r_nnja* and
 26815 the base verb *ŋa* is thus indirect, as shown in (74).

26816 (74) *ŋa* ‘owe’ → *-nja* ‘debt’ → *r_nnja* ‘have a debt’

26817 The verb *rvtseye* ‘do business’ is also directly derived from *tutsye* ‘commerce’
 26818 rather than from the transitive *ntsye* ‘sell’. The *n*-element on *ntsye* is explainable
 26819 as a reduced allomorph of the transitive denominational *nu-* prefix (§20.7.2). Thus,
 26820 while *rvtseye* ‘do business’ is synchronically perceived as deriving from *ntsye*, both
 26821 verbs historically actually derive from the action nominal *tutsye*, as shown in
 26822 Figure 20.1.

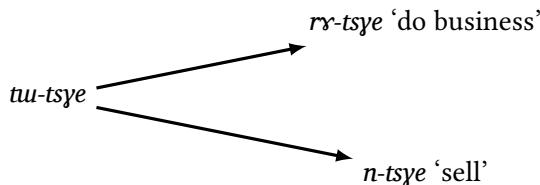


Figure 20.1: The derivational history of *ntsye* and *rvtseye*

26823 20.10.1.2 Semantic commonalities between antipassive verbs and action 26824 nominals

26825 Commonalities between antipassive verbs and action nominals are not restricted
 26826 to stem formation as in §20.10.1.1 above.

26827 The formally regular antipassive verb *rypyas* ‘reclaim land’, ‘clear land for
 26828 farming’ has a restricted meaning in comparison with the corresponding transitive
 26829 verb *pyas* ‘turn over’: while the latter can occur with a wide range of ob-
 26830 jects, the former is exclusively used to refer to turning uncultivated land into
 26831 fields (from the meaning ‘plough’ of the base verb, §18.6.3). The same semantic
 26832 restriction is also observed with the action nominal *tupyas* ‘land clearing’, used
 26833 in collocation with *tcyt* ‘take out’ with a meaning close to that of the antipassive
 26834 *rypyas*.

- 26835 (75) *mui-lo-ny-tso&-ndzi* *kui tupyas*
 NEG-IFR-DENOM-silverweed-DU ERG field.clearing
 26836 *lo-tcxt-ndzi*
 IFR:UPSTREAM-take.out-DU
 26837 ‘They did not collect silverweed, and cleared fields for farming (instead).’
 26838 (31-deluge, 145)

26839 This common semantic restriction suggests that the action nominal *tupyas*
 26840 and *rypyas* are related, and can be accounted for by assuming that the latter is
 26841 a denominational derivation from the former, rather than directly deriving from *pyas*
 26842 ‘turn over’, as shown in (76).

- 26843 (76) *pyab* ‘turn over’, ‘plough fields’ → *tupya_b* ‘land clearing’ → *r_ypya_b* ‘clear
26844 land for farming’

26845 20.10.1.3 Irregular prefix

26846 Another irregular antipassive involves the prefix rather than the stem: the verb
26847 *rususo* ‘think’, ‘ponder’ (§14.5.1.3) from *suso* ‘think’ has *ru-* rather than the regu-
26848 lar *r_y-* prefix. This irregular form is easily accounted for by the hypothesis that an-
26849 tipassive verbs are denominal derivations from action nominals: *rususo* is the ex-
26850 pected regular rhotic denominal from the bare action nominal *tuu-suso* ‘thought’
26851 (§16.4.6).

26852 20.10.1.4 Pathway of reanalysis

26853 Evidence from irregular antipassive verbs presented above in §20.10.1.1, §20.10.1.2
26854 and §20.10.1.3 suggest that the formal resemblance between the *r_y-* antipassive
26855 prefix and the intransitive rhotic denominal *ru-/r_y-* prefix is not simply a coinci-
26856 dence, but that the antipassive derivation came into being from the verbalization
26857 of an action nominal, following the pathway presented in Figure 20.2.

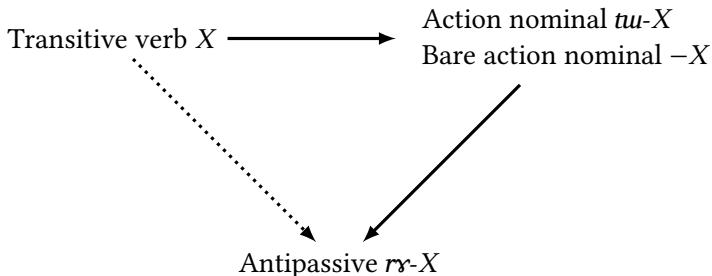


Figure 20.2: The origin of the antipassive *r̥-*

26858 The transitive verb first undergoes nominalization into either an action nom-
26859 inal in *tuu-* (§16.4) or into a bare action nominal (taking either a definite or an
26860 indefinite possessive *tuu-* or *tr-*, §16.4.6). This action nominal then takes the rhotic
26861 intransitive denominal prefix. The rhotic prefix removes the *tuu-/tr-* prefix irre-
26862 spective of whether it is an indefinite possessor prefix or a dental nominalization
26863 prefix, following a general property of denominal derivations in Japhug (§20.1.1,
26864 §16.4.4).

26865 With the exception of the few verbs studied in the section above, where a
26866 morphological or semantic irregularity in the action noun left a trace on the

26867 antipassive verb, the intermediate step leaves no traces. It is possible that once
 26868 a sufficient number of verbalized denominational action nouns had been created by
 26869 this process, the antipassive derivation became productive and that antipassive
 26870 verbs were directly derived from the transitive base verbs.

26871 Even if the antipassive prefix has become functionally separate from the in-
 26872 transitive denominational *rr-* in Japhug, many antipassive verbs remain synchroni-
 26873 cally ambiguous: for instance, the verb *rrcpʰyt* ‘patch clothes’ can either be ana-
 26874 lyzed as the antipassive equivalent of *cpʰyt* ‘patch’ or as a denominational from *tr-cpʰyt*
 26875 ‘patch’ (§18.6.8.3).

26876 The pathway in Figure 20.2 is not specific to Gyalrong languages; antipassive
 26877 affixes from ancient light verb constructions with action nominals have been
 26878 documented in Mande and elsewhere (Creissels 2012, Sansò 2017), providing a
 26879 parallel example of the functional overlap between denominational verbalization and
 26880 light verb constructions in Japhug (§20.1.2).

26881 The same two-step mechanism can be used to account for the other resem-
 26882 blances between denominational prefixes and valency-changing derivations in Ta-
 26883 ble 20.17. More generally, action nominalization neutralizes the transitivity of
 26884 the verb stem, and the new argument structure of the derived verb is determined
 26885 by the denominational prefix.

26886 20.10.2 The proprietive and antipassive *sr-* prefixes and their 26887 tropative counterpart

26888 The form and meaning of the proprietive *sr-* derivation (§18.8) are close to that
 26889 of the denominational proprietive *sr-* (§20.3.1). The *sr-* denominational verbs often occur
 26890 in pairs with transitive or intransitive *nr-* denominational verbs from the same noun
 26891 (§20.7.3), as in *srre* ‘be ridiculous’ and *nrre* ‘laugh’, ‘laugh at’ (from *tr-re* ‘laugh’,
 26892 Table 20.4, §20.3.1).

26893 Both the proprietive *sr-* (§18.8) and the tropative *nr-* (§17.5) can be accounted
 26894 for by assuming a pathway similar to that of the antipassive (Figure 20.2), by
 26895 supposing *sr-* and *nr-* denominational derivations from abstract nouns (§16.4.2) or
 26896 degree nominals (§16.3). The intermediate abstract nouns are actually attested in
 26897 many cases, as in (77) and (78).

26898 (77) *mu* ‘be afraid’ → *tumu* ‘fear’ → *srymu* ‘be frightening’

26899 (78) *mpçyr* ‘be beautiful’ → *trmpçyr* ‘beauty’ → *nrympçyr* ‘find beautiful’

26900 In addition, the proprietive verb *srynat* ‘be exhausting’ (from *nat* ‘be tired’)
 26901 with the allomorph *sry-* presents the same intrusive *-y-* element as the abstract

26902 noun *trynat* ‘tiredness’, supporting the idea that this noun was indeed the intermediate step between the base verb and its proprietive form.

26904 When the base verb undergoing action nominalization and proprietive verbalization is transitive, there is a potential ambiguity, since the proprietive derivation selects as intransitive subject a referent either possessing a particular property or having the tendency or propensity to perform a particular action. With 26905 action verbs such as *mtsuy* ‘bite’, the most natural interpretation will be ‘have 26906 the propensity to bite’ rather than ‘tend to be bitten’ (79), yielding an antipassive 26907 derivation (§18.6.2).

26911 (79) *mtsuy* ‘bite’ → **tumtsuy* ‘action of biting’ → *symtsuy* ‘bite people’

26912 With verbs of cognition, an ambiguity is possible; for instance the *sy-* derivation 26913 from the transitive verb *nuzduy* ‘worry about’ is interpretable either as proprietive 26914 *synuzduy* ‘causing people to worry’ (§18.8.4) or as the antipassive ‘worry 26915 about people’ (§18.8.6). Both of these meanings can be explained as proprietive 26916 denominal derivations from an abstract noun **tV-nuzduy* ‘worry’.

26917 20.10.3 Applicative, sigmatic causative and passive

26918 Following the same type of pathways as for antipassive, proprietive and tropative 26919 derivations, the applicative *nu(y)-* (§17.4), the causative *su(y)-* (§17.2) and the 26920 passive *a-* can be analyzed as having historically originated from the transitive *nu-* 26921 (§20.7.2), the causative/instrumental *su(y)-* (§20.3.2) and the stative *a-* (§20.2.1) 26922 denominalizations from an action nominal, as illustrated in (80).

- 26923 (80) a. *mu* ‘be afraid’ → *tumu* ‘fear’ → *nuymu* ‘be afraid of’
 26924 b. *nat* ‘be tired’ → *trynat* ‘tiredness’ → *suynat* ‘exhaust’, ‘cause to be tired’
 26925 c. *tsʰor* ‘attach’ → **tua-tsʰor* ‘attachment’¹⁵ → *atsʰor* ‘be attached’

26926 The reduplicated reciprocal (§18.4.1) originates from a stative denominal verb 26927 with reduplication expressing plural subject (as in Stau, where not only reduplication 26928 but even triplication is attested with this meaning, Gates 2017), from 26929 which the reciprocal function was a pragmatic inference.

26930 While the applicative, like the antipassive, is restricted to the Core Gyalrong 26931 languages and is certainly a recent innovation, the situation is more complex in 26932 the case of the passive and the causative.

¹⁵This hypothesized action nominal is indirectly attested as the bare infinitive in (181) (§16.2.2.1).

The *a*- passive, which originates from **ŋa*-, is probably related to the valency-decreasing *ŋV*- prefix found in Kuki-Chin (Jacques & Chen 2007), which also expresses reciprocal, reflexive and even antipassive in some cases (So-Hartmann 2009: 203–209, Mang 2006: 57). The sigmatic causative, which has highly complex morphology across Gyalrongic languages (Sun 2007a; Lai 2016), is also widespread in the Trans-Himalayan, and has been discussed in a considerable number of works, including Conrady (1896), Sagart & Baxter (2012), Mei (2012), Handel (2012) and Jacques (2015d).

The existence of the cognates of the valency-changing prefixes *a*- and *su(y)*- in other branches of Trans-Himalayan could be seen as contradicting the hypothesis that they originate from denominalization prefixes. However, two pieces of evidence suggest that the pathway of reanalysis developed to account for the origin of the antipassive is also applicable to these two prefixes.

First, the sigmatic prefix also has a denominational function in various Trans-Himalayan languages from Jinghpao (Dài & Xú 1992: 72, Kurabe 2016: 88) to Old Chinese (Conrady 1896). There is consensus among scholars that this function is at least equally as old as the causative one.

Second, the irregular *sŋ-* allomorph of the causative in *sŋrmi* ‘name someone’ (§17.2.2.7) can be accounted for by analyzing this transitive verb as a causative denominal (§20.3.2) from the noun *tx-rmi* ‘name’ rather than a direct causative derivation from the verb *rmi* ‘be called’.

It is therefore possible either that the postulated pathways in (80b) and (80c) above have taken place independently in several branches, or that the reanalysis had already been completed in the ancestral language ancestral. These hypotheses do not imply that the reanalysis took place only once in each language. In all languages that have preserved the sigmatic denominational and that have some form of bare nominalization, pathways similar to (80b) can have occurred repeatedly even after the sigmatic causative had been fully grammaticalized.

20.11 Loan verbs

While Tibetan verbs are generally borrowed directly (Jacques 2019c), Chinese verbs and adjectives need to undergo denominational derivation to be compatible with verbal morphology.

Speakers born after 1990 profusely use verbs of Chinese origin.¹⁶ Chinese adjectives can be borrowed almost freely with either the *nu-* (§20.7.1) or the

¹⁶Due to the high variability of the pronunciation of Chinese loanwords in Japhug, I make no attempt here at representing them in phonological shape, and use pinyin except in highly lexicalized examples.

26967 *rui-* (§20.4.1) denominal prefixes, as illustrated by *nu<yan>* ‘be strict’ (from 爭² ‘yán> ‘severe, strict’) in (81) and *rui<fuza>* ‘be complicated’ (from 复杂 <fùzá> ‘complicated’) in (82). The *nu-* and *rui-* prefixes are apparently freely interchangeable in this type of words.

- 26971 (81) *wzo u-tui-nui-<yan>* *u-gryl* *mu*
 3SG 3SG.POSS-NMLZ:DEG-DENOM-strict 3SG.POSS-order at.all
 26972 *pui-me*
 PST.IPFV-not.exist
 26973 ‘He was extremely strict.’ (phurpa 2010, 35)
- 26974 (82) *nui-rui-<fuza>* *wo*
 SENS-DENOM-complicated SFP
 26975 ‘It looks complicated!’ (heard in context)

26976 For action verbs, the choice of the *rui-* and *nui-* prefixes is conditioned by transitivity (§20.4.3): *rui-* denominal verbs are intransitive, for example *rukʰyjxwi* ‘have a meeting’ (from 开会 <kāihui> ‘have a meeting’), while their *nui-* counterparts are transitive (*nukʰyjxwi* ‘meet about’). In some cases a light verb construction with the Chinese verb borrowed as a noun also exists; for instance, in addition to *rukʰyjxwi* ‘have a meeting’, it is possible to use *kʰyjxwi* ‘meeting’ in collocation with *βzu* ‘make’ as in (83).

- 26983 (83) *kʰyjxwi nui-ysui-βzu-nui*
 meeting SENS-PROG-make-PL
 26984 ‘They were having a meeting.’ (17-lhazgron, 50)

26985 Borrowed verbs, although they have undergone denominal derivation, sometimes preserve morphosyntactic peculiarities of the corresponding verb in Chinese. For instance, although the manipulation verb *nutʰaj* ‘carry’, like 抬 <tái> ‘lift, carry’, specifically means ‘lift up and carry (something heavy, of more than one person)’ with a constraint on the number of the subject (see example 21, §15.1.2.2).

26991 20.12 Compound verbs

26992 Compounds verbs combine two verb roots (henceforth referred to as ‘*V₁*’ and ‘*V₂*’ following the Kirantological tradition) within the same stem. Unlike bipartite verbs (§11.6.3, Jacques 2018a), the two verb roots are not separable and cannot take redundant person indexation affixes.

Most compound verbs have a denominal prefix (Table 20.18). In some cases, the *V₁* preserves the form of the independent verb, but in other cases occurs in *status constructus* (§5.4), as in *apꝝmbat* ‘be easy to do’, where the root of the base verb *pa* ‘do’ undergoes /-a/ → /-ꝝ/ vowel alternation. Alternations in the *V₂*, as in the case of *axtꝝuxte* ‘be of uneven size’ (with /xti/ → /xte/ alternation, §20.2.1), are much rarer.

Table 20.18: Denominal compound verbs in Japhug

Compound verb	<i>V₁</i>	<i>V₂</i>
<i>rꝝjɔβzur</i> ‘tidy up’ (vt)	<i>joꝝ</i> ‘raise’ (vt)	<i>βzur</i> ‘move’ (vt)
<i>axtꝝuxte</i> ‘be of uneven size’	<i>xtꝝi</i> ‘be small’ (vi)	<i>wxti</i> ‘be big’ (vi)
<i>argyle</i> ‘be extremely happy’ (vi)	<i>rga</i> ‘be happy’ (vi)	=le
<i>andꝝymstu</i> ‘well-ironed’ (vi)	<i>ndꝝym</i> ‘be warm’ (vi)	<i>astu</i> ‘be straight’ (vi)
<i>apꝝmbat</i> ‘be easy to do’ (vi)	<i>pa</i> ‘do’ (vt)	<i>mbat</i> ‘be easy’ (vi)
<i>nꝝrtoꝝpjyt</i> ‘observe’ (vt)	<i>rtoꝝ</i> ‘look, watch’ (vt)	<i>ꝝpjyt</i> ‘observe’ (vt)
<i>nꝝscylxt</i> ‘take somewhere and back home’ (vt)	<i>sco</i> ‘see off’ (vt)	<i>lxt</i> ‘release’, ‘get so. back home’ (vt)
<i>nꝝtsumyut</i> ‘take away and bring back’ (vt)	<i>tsum</i> ‘take away’ (vt)	<i>yut</i> ‘bring’ (vt)
<i>nundꝝymbiom</i> ‘be in a hurry to eat’ (vi)	<i>ndza</i> ‘eat’ (vt)	<i>mbyom</i> ‘be in a hurry’ (vi)
<i>nundꝝrqyr</i> ‘not let eat together’ (vt)	<i>ndza</i> ‘eat’ (vt)	<i>qyr</i> ‘choose’ (vt)
<i>nurkorlut</i> ‘be obstinate’ (vi)	<i>rko</i> ‘be hard’ (vi)	<i>arlut</i> ‘be many’ (vi)
<i>nurygumbri</i> ‘make noise in the bed’ (vi)	<i>rŋgu</i> ‘lie down’ (vi)	<i>mbri</i> ‘cry, sing’ (vi)
<i>raꝝtutsye</i> ‘do business’ (vi)	<i>χtu</i> ‘buy’ (vt)	<i>ntsye</i> ‘sell’ (vt)

Some compound verbs clearly derive from a compound noun by denominal derivation. This is the case of stative verbs derived from compound nouns of dimension such as *axtꝝuxte* ‘be of uneven size’ (Table 20.1, §20.2.1, §5.5.2.2), and also *rꝝjɔβzur* ‘tidy up’, whose corresponding compound action noun *jɔβzur* ‘tidying up’ is used in collocation with the light verb *βzu* ‘make’ (§5.5.2.1).

The verb *argyle* ‘be extremely happy’ does not derive from a compound noun **rgyle*, but rather from the bipartite verb *rga=le*, which only occurs in non-finite

27009 forms (§11.6.3).

27010 The other verbs in Table 20.18 lack a corresponding compound noun. For instance, although *apymbat* ‘be easy to do’ presumably derives from a noun **pymbat*
 27011 ‘easiness to do’ rather than directly from *pa* ‘do’ and *mbat* ‘be easy’, there is no
 27012 such noun in Kamnyu Japhug. It is probable that such a noun used to exist, and
 27013 that only its derived denominal verb was preserved.

27014 A clue that denominal compounds do not directly derive from their base verbs
 27015 is offered by *raxtutsye* ‘do business’. The *V₂* -*tseye* has the same form as that found
 27016 in the action noun *tutsye* ‘commerce’ and the antipassive *rətsye* ‘do business’,
 27017 ‘sell things’ (§18.6.1), while the corresponding transitive verb *ntsye* ‘sell’ has an
 27018 additional *n*- prefix. The explanation for the absence of *n*- in *raxtutsye* is that this
 27019 verb comes from a compound **χtutsye* ‘commerce’ directly built from the action
 27020 noun *tutsye* rather than from the transitive verb *ntsye* ‘sell’. Although **χtutsye* is
 27021 not in common usage, it is considered to be marginally acceptable by Tshendzin.

27022 Some compound verbs lack denominal prefixes, as shown in Table 20.19. However,
 27023 the fact that the *V₁* occurs in *status constructus* in the case of *ngyjtsʰi* ‘feed’
 27024 (*ŋgr-* from *ngu* ‘feed’) and that all the *V₁* of all of these verbs have a prenasalized
 27025 onset may suggest a denominal origin: since the denominal *nu-* prefix has an
 27026 irregular *n*- or homorganic *N*- allomorph (§20.7.1, §20.7.2), it is possible that the
 27027 denominal prefix here was absorbed by the preexisting prenasalization of the *V₁*:
 27028 **n-ŋgr-ctʰi* → **ŋgr-ctʰi* → *ŋgryjtsʰi*.

Table 20.19: Compound verbs without denominal prefix

Compound verb	<i>V₁</i>	<i>V₂</i>
<i>mpumnu</i> ‘be soft and smooth’ (vi)	<i>mpuu</i> ‘be soft’ (vi)	<i>mnu</i> ‘be smooth’ (vi)
<i>mtsurçpas</i> ‘be hungry and thirsty’ (vi)	<i>mtsur</i> ‘be hungry’ (vi)	<i>çpas</i> ‘be thirsty’ (vi)
<i>ngyjtsʰi</i> ‘feed’ (vt) <i>mbijsʰi</i> ‘give to eat and drink’ (vt)	<i>ngu</i> ‘feed’ (vt) <i>mbi</i> ‘give’ (vt)	<i>jtsʰi</i> ‘give to drink’ (vt) <i>jtsʰi</i> ‘give to drink’ (vt)

27030 The semantic relationship between the *V₁* and the *V₂* differs across compound
 27031 verbs. In most cases, the compound has an additive meaning ‘do *V₁* and *V₂*’, as
 27032 in *nərtsumyut* ‘take away and bring back’ (in particular, all verbs in Table 20.19
 27033 are of this type). Another possibility is a head-complement relationship, as that

27034 illustrated by *apymbat* ‘be easy to do’, whose meaning is equivalent to a construc-
27035 tion with *mbat* ‘be easy’ taking a complement clause containing the verb *pa* ‘do’
27036 (§18.9).

27037 20.13 Incorporation

27038 Japhug has few dozen complex verb stems comprising a nominal and a verbal
27039 root. Nearly all of these verbs contain a denominal prefix, and incorporation is
27040 thus analyzed in Japhug as a subtype of denominal derivation ([Jacques 2012d](#)).

27041 Although noun incorporation is not a frequent phenomenon in Japhug, its
27042 productivity is undeniable, as it applies to loanwords, as shown by the verb
27043 *yu* <*piaozi*> *fsoṛ* ‘earn money’ (84), whose base noun 票子 <*piàozi*> ‘ticket’, ‘pa-
27044 per money’ is from Chinese and whose base verb *fsoṛ* ‘accumulate’ comes from
27045 Tibetan དྲୁସ୍ྚୁସ୍ྚ བ୍ୟୋସ୍ྚ ‘accumulate’.

- 27046 (84) *ny-mbro c^ho ny-rŋwul tu-rke-a tce*
 2SG.POSS-horse COMIT 2SG.POSS-silver IPFV-put.in[III]-1SG LNK

27047 *kwu-yua-<piaoz>-fsor jy-ce tce*
 SBJ:PCP-DENOM-money-earn IMP-go LNK

27048 'I will give you a horse and some silver, go and earn some money.'

27049 (Lobzang 2005, 17)

20.13.1 Incorporation and denominal derivation

A considerable proportion of incorporating verbs in Japhug are denominal derivations from Noun-Verb action nominal compounds (§5.5.5.2, §5.5.5.3) which are still synchronically attested. Table 20.20 presents a sample of incorporating verbs with the corresponding action nouns, as well as the base nouns and base verbs. These action nominals also occur in collocation with light verbs, with meanings similar to those of the incorporating verbs (§20.1.2, §20.13.4).¹⁷

When the incorporating verb is transitive, its direct object corresponds in some cases to an oblique argument in the light verb construction. For instance, the verb *nuzgrutç'uu* ‘give a nudge’ encodes the patient (the person receiving the nudge) as object (85), while in the light verb construction with the compound *zgrutç'uu* ‘nudge’, the patient is marked by the relator noun *u-tar* ‘on, above’ (86) (§8.3.4.3).

¹⁷Japhug (pseudo-)incorporating verbs are typologically similar to the type of *οἰκοδομέω* ‘build’ in Greek (Benveniste 1966a).

Table 20.20: Examples of incorporating verbs from noun-verb compounds

Incorporating verb	Noun	Verb
<i>yuc^hṛts^hi</i> ‘drink alcohol’ (vi)	<i>c^ha</i> ‘alcohol’ ⇐ <i>c^hṛts^hi</i> ‘alcohol drinking’	<i>ts^hi</i> ‘drink’ (vt)
<i>yuylutiçṛt</i> ‘take out dung’ (vi)	<i>tui-ṛli</i> ‘dung’ ⇐ <i>c^hṛts^hi</i> ‘dung collecting’ (out of the stables)	<i>tçṛt</i> ‘take out’ (vt)
<i>yucup^hut</i> ‘take out stones’ (vi)	<i>cuu</i> ‘stone’ ⇐ <i>cuup^hut</i> ‘stone clearing’ (out of the fields)	<i>p^hut</i> ‘take off’ (vt)
<i>yuk^huts^hoṛ</i> ‘hunt with dogs’ (vi)	<i>k^huna</i> ‘dog’ ⇐ <i>k^huts^hoṛ</i> ‘hunting with dogs’	<i>ts^hoṛ</i> ‘attach’ (vt)
<i>yurjufsoṛ</i> ‘earn riches’ (vi)	<i>tui-ṛju</i> ‘riches’ ⇐ <i>rjufsoṛ</i> ‘earning money’	<i>fsoṛ</i> ‘accumulate’ (vt)
<i>yusup^hut</i> ‘cut firewood’ (vi)	<i>si</i> ‘wood’ ⇐ <i>sup^hut</i> ‘firewood cutting’	<i>p^hut</i> ‘take off’ (vt)
<i>yutsymts^hi</i> ‘lead the way’ (vi)	<i>tsu</i> ‘path’ ⇐ <i>tsymts^hi</i> ‘leading the way’	<i>mts^hi</i> ‘lead’ (vt)
<i>nuzgrutç^huu</i> ‘give a nudge’ (vt)	<i>tui-zgruu</i> ‘elbow’ ⇐ <i>zgrutç^huu</i> ‘nudge’	<i>tç^huu</i> ‘stab’ (vt)
<i>nṛkṛtç^huu</i> ‘give a headbutt’ (vt)	<i>tui-ku</i> ‘head’ ⇐ <i>kṛtç^huu</i> ‘headbutt’	<i>tç^huu</i> ‘stab’ (vt)
<i>nusnuṇaṛ</i> ‘harm’ (vt)	<i>tui-sni</i> ‘heart’ ⇐ <i>snuṇaṛ</i> ‘harming people’	<i>ṇaṛ</i> ‘be black’ (vi)
<i>nṛp^huxtsuu</i> ‘break clods of earth’ (vi)	<i>tx-p^huu</i> ‘clod (of earth)’ ⇐ <i>txp^huxtsuu</i> ‘breaking clods of earth’	<i>xtsuu</i> ‘pound’ (vt)
<i>nṛq^haru</i> ‘look back’ (vi)	<i>wu-q^hu</i> ‘after’ ⇐ <i>q^haru</i> ‘look back’	<i>ru</i> ‘look’ (vi)

- 27062 (85) *t̪-wy-nu-zgrui-tc^huu-a*
AOR-INV-DENOM-elbow-stab-1SG
27063 ‘He gave me a nudge.’ (elicited)
- 27064 (86) *a-taꝝ ny-zgrui-tc^huu ma-ty-tui-lyt ma juu-mŋym*
1SG.POSS-on 2SG.POSS-elbow-stab NEG-IMP-2-release LNK SENS-hurt
27065 ‘Don’t give me a nudge, it hurts.’ (elicited)

27066 Alternatively, the patientive argument can be encoded as a possessive prefix
27067 on the base nominal compound. For instance, the object of the *nusnupas* ‘harm’
27068 (2SG in 87) refers to the person who is harmed, and corresponds to the prefix on
27069 the compound noun *snupas* ‘harming people’ in the light verb construction (3PL
27070 in 88).

- 27071 (87) *ma-nui-tui-mu tce azo mx-ta-nui-snui-pas*
NEG-IMP-2-be.afraid LNK 1SG NEG-1→2-DENOM-heart-black:FACT
27072 ‘Don’t be afraid, I will not do any harm to you.’ (140429 jiedi-zh, 187)
- 27073 (88) *turme ra nui-snui-pas juu-ysui-βzu tce*
people PL 3PL.POSS-heart-black SENS-PROG-make LNK
27074 ‘It was harming people.’ (150827 taisui, 31)

27075 Table 20.20 only includes examples with the denominal prefixes *yuu-* (§20.5)
27076 and *nui-/ny-* (§20.7), but other denominal prefixes are attested in this construc-
27077 tion. In particular, the alternative forms *rurjuufsor* ‘earn riches’ (with the rhotic
27078 denominal, §20.4) and *suzgruit^huu* ‘give a nudge’ (with the instrumental sigmotic
27079 denominal, §20.3.2) are attested alongside *yurjuufsor* ‘earn riches’ and *nui^hgruit^huu*
27080 ‘give a nudge’.

27081 This use of the term ‘incorporation’ to refer to this construction is debatable,
27082 since unlike prototypical incorporation, which originates from noun+verb coales-
27083 cence (Mithun 1984), in the case of Japhug a two-step process has to be posited:
27084 (i) action nominal compounding followed by (ii) denominal derivation. However,
27085 this derivation process is not isolated cross-linguistically: similar constructions
27086 are found in Ancient Greek (Benveniste 1966a) and may be posited for proto-
27087 Algonquian (Garrett 2004; Jacques 2012d).

27088 Not all incorporating verbs derive transparently from Noun+Verb compounds.
27089 In spite of the presence of a denominal prefix on the verb, the expected action
27090 nominal is not always attested. For instance, the intransitive verb *nuijlsly* ‘herd
27091 hybrid yaks’ (from *jla* ‘hybrid yak’ and *ly* ‘herd’) might have been derived from
27092 a noun such as **jly-lsy*, but no such noun exists anymore.

In some cases, denominal derivations are derived directly from a Noun+Verb collocation. Table 20.21 presents examples of denominal verbs in *nu-*/*ny-* and *sr-* coming from lexicalized complex collocations. In these constructions, the base verb is intransitive, and the base noun its subject (§20.13.3.1). Some of the nouns and/or verbs are orphan lexemes (§22.4.3.1, §22.4.3.2), and are not attested as free elements.

Table 20.21: Incorporating verbs from noun-verb collocations

Incorporating verb	base noun	Noun+verb collocation
<i>nuŋŋymkʰe</i> ‘be skinny’ (vi)	<i>w-ŋyrm</i> ‘flesh’	<i>w-ŋyrm + kʰe</i> ‘be skinny’
<i>nuŋŋymsu</i> ‘be plump’ (vi)	<i>w-ŋyrm</i> ‘flesh’	<i>w-ŋyrm + su</i> ‘be plump’
<i>srzilos</i> ‘be disgusting’ (vi)	<i>tu-zi</i> ‘nausea’	<i>tu-zi + los</i> ‘have nausea’
<i>nyzilos</i> ‘have nausea’ (vi)	<i>tu-zi</i> ‘nausea’	
<i>syrmbrunŋgu</i> ‘be detestable’ (vi)	<i>tr-mbru</i> ‘anger’	<i>tr-mbru + ŋgu</i> ‘be angry’
<i>nyrçrmŋym</i> ‘cherish’ (vt)		<i>w-rça + mŋym</i> ‘cherish’
<i>srwombi</i> ‘be discouraging’, ‘be hopeless’ (vi)		<i>w-wo + mbi</i> ‘be discouraged’, §18.5.4
<i>nywombi</i> ‘lose hope’ (vt)		
<i>nusrobmbryt</i> ‘be in agony’	<i>tu-sro</i> ‘life’	<i>mbryt</i> ‘break’, ‘be cut’
		§18.5

Three types of denominal derivations are found in Table 20.21, all independently attested with simple nouns. First, we find stative intransitive verbs in *nu-* (§20.7.1), whose intransitive subject corresponds to the possessor of the base noun as in the case of *nuŋŋymkʰe* ‘be skinny’ (compare 89a and 89b).

- (89) a. *ŋui-tui-nui-ŋym-kʰe*
SENS-2-DENOM-flesh-be.skinny
'You are skinny.' (heard in context)
- b. *ny-ŋym* *ŋui-kʰe*
2SG.POSS-flesh SENS-be.skinny
'You are skinny.' (140517 mogui de jing zh, 22)

Second, some verbs make use of the *sr-* proprietive denominal prefix (§20.3.1). The verb *srzilos* ‘be disgusting’ is paired with the *ny-* denominal *nyzilos* ‘have

27109 nausea' (other verb pairs of the same type are found in Table 20.4), while *symbru*
 27110 *mbrungu* 'be detestable' instead corresponds to the simple denominal *symbru*
 27111 'get angry' (§20.3.1).

27112 Third, the transitive verbs *nycymjym* 'cherish' and *nyzombi* 'lose hope' have a
 27113 tropative meaning (§20.7.2). Their transitive subjects corresponds to the posses-
 27114 sor of the base noun, as shown by (90a) and (90b).

- 27115 (90) a. *a-tcui* *jui-ny-rcx-mjam-a*
 1SG.POSS-son SENS-DENOM-cherish(1)-cherish(2)-1SG
 27116 'I cherish my son.' (elicited)
 27117 b. *a-tcui* *a-rcia* *mjym*
 1SG.POSS-son 1SG.POSS-cherish(1) cherish(2):FACT
 27118 'I cherish my son.' (elicited)

27119 Other incorporating verbs probably originate from a Noun+Cerb collocation
 27120 which does not exist anymore. From instance, *amnaxts^hum* 'be petty' (91) derives
 27121 from *tuu-mpas* 'eye' and *xts^hum* 'be thin' with the denominal prefix *a-*, but no
 27122 collocation **tuu-mpas + xts^hum* exists, though the etymological relationship with
 27123 the base noun and verb is still synchronically transparent.

- 27124 (91) *jui-tuu-y-mpas-ts^hum*
 SENS-2-DENOM-eye-be.thin
 27125 'You are petty-minded.' (elicited)

27126 There are also a handful of incorporating verbs without a dedicated denominal
 27127 prefix, as illustrated by Table 20.22.

Table 20.22: Incorporating verbs without dedicated denominal prefix

Incorporating verb	base noun	base verb
<i>amysbu</i> 'have rickets' (vi)	<i>tuu-mi</i> 'foot'	<i>ajbu</i> 'be bowed' (vi)
<i>akymtcos</i> 'be pointy-headed' (vi)	<i>tuu-ku</i> 'head'	<i>amtcos</i> 'be pointy' (vi)
<i>krytupa</i> 'tell' (vt)	<i>kry-ti</i> 'the thing that is said'	<i>pa</i> 'do' (vt)

27128 In the case of *amysbu* 'have rickets' and *akymtcos* 'be pointy-headed', the nom-
 27129 inal stems *mr-*, *kry-* and *suu-* in *status constructus* appear to be infixated within

27130 the stem of the base verbs *ajbu* ‘be bowed’ and *amtçov* ‘be pointy’. The stem
 27131 *a<mr>bu* in addition lacks the -*j*- preinitial found in *ajbu*.

27132 Infixation is not the only possibility to account for these two verbs however,
 27133 since the initial *a*- syllables themselves are probably frozen denominal prefixes
 27134 (see also §19.7.7). An alternative hypothesis is that both the apparent base verbs
 27135 and the incorporating verbs are derived. The intransitive verb *nusuzze* ‘trans-
 27136 port wood’ provides a possible model. This compound verb, which comes from
 27137 the compounding of *si* ‘wood’ (with vowel alternation *sui-*, §5.4.1) and the root
 27138 of *nuzze* ‘transport’, at first glance seems to be a case of noun infixation within
 27139 the stem *nuzze*. However, the existence of the action nominal *suzze* ‘firewood
 27140 transportation’ shows that *nusuzze* ‘transport wood’ is a trivial example of de-
 27141 nominal incorporation like the verbs in Table 20.20 above. The anomaly here is
 27142 the verb *nuzze* ‘transport’, whose *nu*- prefix must be secondary – a likely expla-
 27143 nation for this prefix is that *nuzze* is a denominal derivation from a lost action
 27144 nominal **tuu-zze* ‘transportation’.

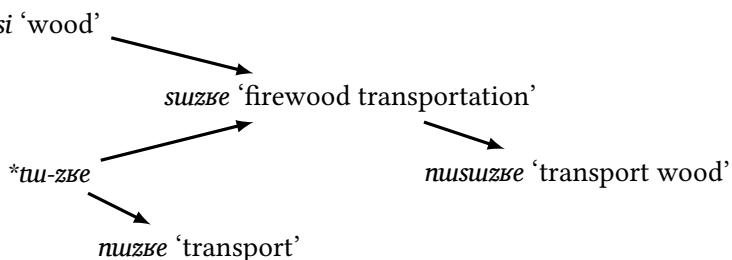


Figure 20.3: The derivational history of *nusuzze* ‘transport wood’

27145 Hence, as illustrated in Figure 20.3, *nusuzze* ‘transport wood’ is only indirectly
 27146 related to *nuzze* ‘transport’, and the infixation hypothesis is certainly wrong in
 27147 this case. A scenario in the same lines is possible for *amxu* ‘have rickets’ and
 27148 *akymtçov* ‘be pointy-headed’.

27149 The only example of nominal incorporation without a denominal prefix is the
 27150 defective verb *krytupa* ‘tell’ (its conjugation is presented in Table 14.15, §14.3.4),
 27151 which comes from the compounding of the object participle *kry-ti* ‘the thing that
 27152 is said’ (§16.1.2) with *pa* ‘do’. Non-denominal incorporating verbs are much more
 27153 common in Khroskyabs (Lai 2017: 388–411) than in core Gyalrong languages.

20.13.2 Incorporation and other derivations

27155 Like other denominal verbs, incorporating verbs undergo productive voice deriva-
 27156 tions. In some cases, only the derived verb exists: for instance, the intransitive

²⁷¹⁵⁷ *anurjyruru* ‘look at each other’s faces’ has the form of a reduplicated reciprocal
²⁷¹⁵⁸ (§18.4.1) from a transitive verb **nu-rjy-ru* ‘look at X’s face’ (from *tu-rjɑ* ‘face’ and
²⁷¹⁵⁹ *ru* ‘look’, §20.13.3.3), but no such base verb exists at least in the Kamnyu dialect
²⁷¹⁶⁰ of Japhug (§18.4.1.3).

²⁷¹⁶¹ 20.13.3 Syntactic function of the incorporated word

²⁷¹⁶² The incorporated nouns have four syntactic functions: intransitive subject, ob-
²⁷¹⁶³ ject/semi-object, goal/location adjunct and instrument. There are no examples
²⁷¹⁶⁴ of incorporated transitive subjects in Japhug.

²⁷¹⁶⁵ 20.13.3.1 Incorporation of intransitive subject

²⁷¹⁶⁶ Intransitive subject incorporation is found in verbs deriving from noun+intransitive
²⁷¹⁶⁷ verb collocations such as those listed in Table 20.21 above such as *nusrobmbryst*
²⁷¹⁶⁸ ‘be in agony’ from *tu-sroks* ‘life’ and *mbryst* ‘break’, ‘be cut’. None of these verbs
²⁷¹⁶⁹ has a dummy intransitive subject: the incorporated subject does not saturate the
²⁷¹⁷⁰ subject function. Rather, either the possessor of the base noun (see examples 89a
²⁷¹⁷¹ and 89b above in §20.13.1) or an external referent is promoted to intransitive sub-
²⁷¹⁷² ject status (or to object status in the case of transitive verbs such as *nyrcymjym*
²⁷¹⁷³ ‘cherish’).

²⁷¹⁷⁴ There are no clear examples of subject incorporation among verbs deriving
²⁷¹⁷⁵ from noun+verb action nominals.

²⁷¹⁷⁶ 20.13.3.2 Incorporation of object

²⁷¹⁷⁷ Object incorporation is found in some incorporating verbs that derive from noun+
²⁷¹⁷⁸ verb action nominal compounds such as those presented in Table 20.20 (§20.13.1)
²⁷¹⁷⁹ and others which probably originate from lost compounds. It is a saturating in-
²⁷¹⁸⁰ corporative, which removes the object from the argument structure of the verb:
²⁷¹⁸¹ incorporating verbs of this type are all intransitive, while their base verbs are all
²⁷¹⁸² transitive. Typical examples include *yucʰrtsʰi* ‘drink alcohol’ (from *cʰa* ‘alcohol’
²⁷¹⁸³ and *tsʰi* ‘drink’) or *nypʰuxtsui* ‘break clods of earth’ (from the stem of *tr-pʰu* ‘clod’
²⁷¹⁸⁴ (of earth) with *xtsui* ‘pound’) (§20.13.4).

²⁷¹⁸⁵ Some lexicalized noun+verb collocations have an incorporating form. For in-
²⁷¹⁸⁶ stance, the transitive verb *ru*, which only¹⁸ occurs with the noun *zruiy* ‘louse’ with

¹⁸This verb must (at least synchronically) be distinguished from two homophonous verbs: the in-
 transitive *ru* ‘look at’ (§15.1.2.4) and the transitive *ru* ‘fetch, bring’ (which requires an associated
 motion prefix, §15.2.9).

the meaning ‘pick lice off’, can also incorporate the same noun to yield *nuzruyru* ‘pick lice off’.

The semi-transitive verb *rga* ‘like’ (§14.2.3) can incorporate a semi-object, as in *nuqmurga* ‘be talkative’, ‘like to talk a lot’ (with the *status constructus* *qmu-* of the inalienably possessed noun *tua-qmi* ‘word’) and *nuc^hyrga* ‘like to drink alcohol’ (with *c^hy-* from *c^ha* ‘alcohol’).

20.13.3.3 Incorporation of goal/locational adjunct

Goals or locational adjuncts can also be incorporated. Unlike objects (§20.13.3.2), they do not saturate the object function of the verb and the incorporating verb has the same transitivity as that of the base verb. For instance, the verb *nryq^hyrga* ‘put on’ (of clothes worn on the shoulders on the top of other clothes) is transitive as is the base verb *yrga* ‘wear’ and selects as object the garment that is worn, typically a raincoat (see 189, §9.2.3). The incorporated noun *u-q^hu* ‘after’, ‘behind’ (in *status constructus* *q^hy-*) here indicates the location where the piece of garment is worn (‘wear on the back’).

However, goal argument saturation occurs when the base verb requires a goal argument. For instance, *ru* ‘look’ selects a goal or dative arguments (§14.2.4), but the incorporated verb *nryq^haru* ‘look back’, which contains the locational noun *u-q^hu* ‘after’ (with the bound form *q^ha-* rather than *q^hy-*), is strictly intransitive.

The intransitive verb *nuk^hyrygu* ‘lie down to rest’ provides an example of locational adjunct incorporation. It derives from the noun *k^ha* ‘house’ (*k^hy-*) and the intransitive verb *rjgu* ‘lie down’, ‘sleep’. The original sense of this verb was probably ‘lie down (somewhere) in the house’ or perhaps even more specifically ‘lie down in the dining room’ (the term *k^hyjmu* ‘dining room’ contains the *status constructus* *k^hy-* as first element), but it has now lexicalized further, meaning ‘lie down to rest in a casual way’ in a place unfit for this purpose and not necessarily within the house (as illustrated by 92).

- 27214 (92) *smxt tumda rjylpu nura yuu nur-sakaβ tṣu nutcu*
 pl.n pl.n king DEM:PL GEN 3PL.POSS-well path DEM:LOC
 27215 *c-k^h-ryzi nu-ŋu. lo-nui-k^h-rjgu kui-fse ndyre*
 TRAL-AOR-stay SENS-be AOR-DENOM-house-lie.down SBJ:PCP-be.like LNK
 27216 ‘He went to the water well of the king of Smad, and stayed there. He lay
 27217 down on the ground in a casual way.’ (2005-stod-kunbzang, 9-10)

27218 **20.13.3.4 Incorporation of instrument**

27219 Instrument incorporation, like object incorporation (§20.13.3.2), is found in de-
 27220 nominal verbs deriving from action nominal compounds (Table 20.20). Like goal
 27221 and locational adjunct incorporation (§20.13.3.3), it does not saturate the object
 27222 function: the verb *nuzgrutčʰu* ‘give a nudge’ from *tu-zgru* ‘elbow’ and *tčʰu* ‘stab’
 27223 is transitive like its base verb, as shown by example (85) (§20.13.1 above).

27224 Some instrument incorporating verbs are lexicalized, for instance *nui-rmbu-*
 27225 *χtci* from *tu-rmbi* ‘urine’ (regular *status constructus rmbu-*) and *χtci* ‘wash’ does
 27226 not mean ‘wash with urine’; *χtci* is to be understood here as ‘drench’ (as in
 27227 ‘drenched in the rain’ in 13, §26.1.1.4), and although *nui-rmbu-χtci* probably origi-
 27228 nally meant ‘piss on’, its present meaning is instead ‘spray a liquid on’, in parti-
 27229 cular of a species of ants (93).

- 27230 (93) *tce nutcu tce qro nui u-tplav u-ηgwi ra ku-ce,*
 LNK DEM:LOC LNK ant DEM 3SG.POSS-eye 3SG.POSS-in PL IPFV:EAST-go
 27231 *u-tplav nui ku-mtsuwy ny tu-nui-rmbu-χtci nura tce,*
 3SG.POSS-eye DEM IPFV-bite ADD IPFV-DENOM-urine-wash DEM:PL LNK
 27232 ‘(When the bear comes to eat them), the ants go into its eyes, bite its eyes
 27233 and spray acid on them.’ (26-qro, 45-46)

27234 Instruments other than body parts can be incorporated, for instance *tr-jlyβ*
 27235 ‘steam’ in the verb *nryjlyβsqa* ‘stew’ from *sqa* ‘cook’. However, this is also a lexi-
 27236 calized incorporating verb, which does not mean ‘cook with steam’ as could have
 27237 been expected, but rather ‘stew for a long time’.

27238 Instrument incorporation is more common with transitive verbs, but examples
 27239 also exists with intransitive verbs, for instance *numbrumtsaꝝ* ‘skip rope’ from
 27240 *tumbri* ‘rope’ (*mbru*-) and *mtsaaꝝ* ‘jump’.

27241 **20.13.4 Incorporation and other constructions**

27242 Incorporating verbs occur in the same contexts as the corresponding non-com-
 27243 pounded syntactic constructions when these exist, both in the case of incorpora-
 27244 ting verbs from noun+verb collocations such as *nuyrymkʰe* ‘be skinny’ (94) (see
 27245 also 89a and 89b above) and of those from action nominal compounds such as
 27246 *nypʰuxtsu* ‘break clods of earth’ (95).

- 27247 (94) *icqʰa qazo nui-nym kui-sur nura qʰe*
 the.aforementioned sheep 3PL.POSS-flesh SBJ:PCP-be.plump DEM:PL LNK
 27248 *nui-nuyu-kryy, qazo kui-nui-nym-kʰe nura [...]*
 SENS-FACIL-shear sheep SBJ:PCP-DENOM-flesh-be.skinny DEM:PL

- 27249 *máj-nuyur-kryy*.
 NEG:SENS-FACIL-shear
- 27250 'Sheep that are plump are easy to shear, but sheep that are skinny are
 difficult to shear.' (160712 smAG, 28-29)
- 27252 (95) *maka lu-kui-nyp^huuxtsui* *tce tce rcanui*,
 at.all IPFV-GENR:S/O-DENOM-clod-pound LNK LNK UNEXP:DEG
 ty-p^huu *lú-wy-xtsui* *tce*,
 INDEF.POSS-clod IPFV-INV-pound LNK
 'When people break clods of earths, ...' (26-mYaRmtsaR, 89)
- 27255 Nevertheless, these constructions are not completely equivalent. The minimal
 triplet in (96) can be used to illustrate some of the differences between them.
- 27257 (96) (i) *cui-p^hut* *nui-βzu-t-a*
 stone-take.off AOR-do-PST:TR-1SG
- 27258 (ii) *nui-yui-cui-p^hut-a*
 AOR-DENOM-stone-take.off-1SG
- 27259 (iii) *cui nui-p^hut-t-a*
 stone AOR-take.out-PST:TR-1SG
 'I cleared the stones (from the field).' (elicitation)

27261 The non-compounded construction (iii) is the only one that can occur if the ar-
 gument is referential or takes a determiner (unlike languages like Hopi which al-
 low determiners to have scope over an incorporated noun, see Hill 2003; Haugen
 2008). In the light verb construction with the action nominal compound *cup^hut*
 'taking stones' (out of the fields, before ploughing) (i) and the incorporating verb
 yucup^hut 'take out stones' (ii), the bound nominal element *cui-* cannot be used to
 refer to specific stones that have been previously mentioned. A similar constraint
 is observed with other denominal verbs (§20.1.2). The light verb construction (i)
 is used to highlight that an action takes a long time or effort, or occurs many
 times in this particular example.

27271 The usage differences between (i)–(iii) in (96) however are not generalizable to
 all incorporating verbs, in particular because the existence of an incorporating
 verb does not imply that the constructions in (i) and (iii) also exist, and because
 compounding is not always compositional. The triplet of constructions in (97)
 with *nyq^haru* 'look back' (§20.13.3.3), the compound *q^haru* 'look back' (§20.13.1)
 and the non-compounded construction with *u-q^hu* 'after', 'behind' and *ru* 'look',
 illustrate a different situation.

- 27278 (97) (i) *wzo nuu, tatpa ta-ta ma q^haru mucin zo*
 3SG DEM faith AOR:3→3'-put LNK look.back at.all EMPH
mui-pa-lxt ny t^y-ari jnu-ηu.
 NEG-AOR:3→3'-release ADD AOR:UP-go[II] SENS-be
 'He kept faith and did not look back at all and went up (did not fall
 down and reached the heavens).' (2005 Norbzang, 129)
- 27280
 27281
 27282 (ii) *ts^hoŋχpum nyruβzaj wzo muma zo pui-nx-q^ha-ru-nu*
 ANTHR ANTHR 3SG apart.from EMPH AOR-DENOM-BACK-look-PL
jnu-ηu, kui~kui-tu zo pui-atyr-nu jnu-ηu,
 SENS-be TOTAL~SBJ:PCP-exist EMPH AOR-fall-PL SENS-be
 'Apart from Tshong dpon Norbzang, they looked back, and all of
 them fell down.' (2005 Norbzang, 129)
- 27283
 27284
 27285 (iii.a) *u^h-vruu nuu ki tu-fse q^he u^h-q^hu*
 3SG.POSS-horn DEM DEM.PROX IPFV-be.like LNK 3SG.POSS-behind
ri lu-ru,
 LOC IPFV:UPSTREAM-look
 'Its horn is turned towards its back like that.' (20-RmbroN, 108)
- 27286
 27287 (iii.b) *t^hceme nuu lo-će tce si u^h-q^hu nutcu*
 girl DEM IFR:UPSTREAM-go LNK tree 3SG.POSS-behind DEM:LOC
lo-ru ri,
 IFR:UPSTREAM-look LNK
 (150901 changfamei-zh, 221)
 'The girl went there and looked behind the tree.'(150901
 changfamei-zh, 221)
- 27288
 27289 (iii.c) *jo-cq^hlxt-ndzi tce, ndzi-qhu jo-ru ma nuu*
 IFR-disappear-DU LNK 3DU.POSS-behind IFR-look LNK DEM
ma u^h-kypa pjy-me.
 apart.from 3SG.POSS-manner IFR.IPFV-not.exist
 'The two them disappeared, and the only thing shed could do was
 looking at them from behind (at their back as they were going away).' (140506 shizi he huichang de bailingniao-zh, 215)

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 27303 The examples above show that the collocation of *u^h-q^hu* 'after', 'behind' and *ru*
 'look' is semantically quite different from the compound *q^haru* 'look back' and its
 corresponding denominating verb: its range of meanings includes 'be
 turned behind, towards the back' (iii.a), 'look behind X' (iii.b) or 'look at X from
 behind' (iii.c). The light verb construction (i) and the incorporating verb (ii) by

27304 contrast can only be used in the sense of ‘look back’. Unlike in (96), the light verb
27305 construction (i) is not used to express either protracted or repeated action since
27306 *q^haru* ‘look back’ is semelfactive, but rather occurs in (97) to put more emphasis
27307 on the negation of the action (he did not look back in the slightest).

27308 The contrast between the three constructions in (96) and (97) also has to do
27309 with the relative frequency of the verbal forms in which they appear. In parti-
27310 cular, an important proportion of incorporating verbs in the corpus are subject
27311 participles (as in 94 above) or generic forms (as in 95).

²⁷³¹² 21 Tense, aspect, modality and evidentiality

²⁷³¹⁴ 21.1 Introduction

²⁷³¹⁵ All finite verb forms in Japhug have one primary TAME (tense, aspect, modality, evidentiality) category, encoded by orientation preverbs (^{21.1.1}), stem alternations (^{21.1.2}) and additional affixes in some cases (^{21.1.3}). Primary TAME categories can be combined with secondary aspectual and modal prefixes (^{21.6}, ^{21.7}).

²⁷³²⁰ Table ^{21.1} summarizes the primary TAME categories in Japhug. Labels such as ‘Imperfective’ or ‘Egophoric Present’ are conventional names for Japhug-specific morphological verbal categories, and therefore capitalized in this chapter and in the whole grammar following the convention proposed by Haspelmath (2010: 674) and others. The use of these terms makes no implication that they have any crosslinguistic validity or that the Japhug categories are amenable to direct comparison with TAME categories in other languages.

²⁷³²⁷ Apart from the Factual Non-Past, all primary TAME categories take one orientation preverb. Some categories, such as the Sensory, are marked by the same preverb on all verbs. Other categories select a preverb belonging to one of the four series (A, B, C or D, see Table ^{21.2} below and Table ^{21.1.1}, §^{15.1.1.1}), whose orientation is lexically specified by the verb (^{15.1.5}).

²⁷³³² Primary TAME categories in Japhug are divided into four groups: Non-Past (Factual, Egophoric Present, Sensory, ^{21.3}), Imperfective (which is mainly used in subordinate clauses or in periphrastic constructions, ^{21.2}), Past (Aorist, Inferential, ^{21.5}) and Modal (Imperative, Irrealis, Dubitative, ^{21.4}). This classification is based on both semantic and formal features, and is justified in each of the sections of this chapter.

²⁷³³⁸ In addition to the primary categories, periphrastic TAME categories are built by combining finite verbs with the copula *yu* ‘be’. The main verb can be in the Imperfective (^{21.2.2}, §^{21.5.3.5}), in the Factual Non-Past to express periphrastic Proximative (^{21.6.2.1}) or in the Inferential (^{21.5.2}). The use of the copula as

Table 21.1: Primary TAME categories

		Stem	Preverb	Reference
Factual Non-Past	FACT	1 or 3	no preverb	§21.3.1
Sensory	SENS	1 or 3	<i>jnu-</i>	§21.3.2
Egophoric Present	PRS	1 or 3	<i>ku-</i>	§21.3.3
Imperfective	IPFV	1 or 3	B	§21.2
Aorist	AOR	2	A or C	§21.5.1
Past Imperfective	PST.IPFV	2	<i>pu-</i>	§21.5.3
Inferential	IFR	1	D	§21.5.2
Inferential Imperfective	IFR.IPFV	1	<i>pjr-</i>	§21.5.3
Irrealis	IRR	1 or 3	<i>a-</i> + A	§21.4.1
Imperative	IMP	1 or 3	A	§21.4.2, §21.4.3
Dubitative	DUB	1 or 3	<i>ku-</i> + autive	§21.4.4

²⁷³⁴² postverbal TAME auxiliary should not be confused with its focalizing function
²⁷³⁴³ (§22.5.3.2).

²⁷³⁴⁴ 21.1.1 Preverbs

²⁷³⁴⁵ Some of the Primary TAME categories require the same preverb with all verbs
²⁷³⁴⁶ (Egophoric Present, Sensory, Dubitative). The other categories (Imperfective, Aorist,
²⁷³⁴⁷ Inferential, Irrealis, Imperative) only specify preverb type (§21.1.1.1), while the
²⁷³⁴⁸ orientation of the preverb is either lexically determined, or expresses spatial ori-
²⁷³⁴⁹ entation (in the case of orientable verbs §15.1.2).

²⁷³⁵⁰ 21.1.1.1 Morphology

²⁷³⁵¹ Orientation preverbs in Kamnyu Japhug come in four series, which contribute (in
²⁷³⁵² combination with other formatives and morphological devices) to mark TAME,
²⁷³⁵³ transitivity and person. Each series comprises seven orientations, divided into
²⁷³⁵⁴ Upper orientations (up, upstream, eastwards), Lower orientation (down, down-
²⁷³⁵⁵ stream, westwards) and unspecified orientation (§15.1.1.1). Table 21.2 lists the
²⁷³⁵⁶ rules of preverb formation. The C- is the initial consonant of the preverb, which
²⁷³⁵⁷ encodes the orientation: *t*- UPWARDS, *p*- DOWNWARDS, *l*- UPSTREAM, *t^h/c^h*- DOWN-
²⁷³⁵⁸ STREAM, *k*- EASTWARDS, *n-/j-* WESTWARDS and *j*- 'unspecified'.

27359 Upper vs. Lower orientation preverbs have a different vocalism (except for
 27360 type C preverbs, whose vowel is neutralized to *Ca-*), and type B and D lower ori-
 27361 entation preverb have a palatalized onset, realized as *c^h-* for DOWNSTREAM pre-
 27362 verbs (rather than *t^ji-*) and as *n-* for WESTWARDS preverbs. A complete list of all
 27363 preverbs in presented in Table 15.1 (§15.1.1.1). Only types A and B are attested on
 27364 non-finite forms (§16.1.1.2).

Table 21.2: Orientation preverbs and TAME categories

	Upper	Lower	TAME categories
A	<i>Cy-</i>	<i>Cu-</i>	AOR, PST.IPFV, IMP, IRR
B	<i>Cu-</i>	<i>Cju-</i>	IPFV, SENS, PRS, DUB
C	<i>Ca-</i>	<i>Ca-</i>	AOR (3→3')
D	<i>Co-</i>	<i>Cjy-</i>	IFR, IFR.IPFV

27365 21.1.1.2 Ambiguity with type A preverbs

27366 Type A preverbs occur with a wide range of TAME categories. In particular,
 27367 Aorist and Imperative both select the type A preverb, without any additional
 27368 prefix. A few ambiguous forms do exist in the case of intransitive verbs in parti-
 27369 cular: for instance, *k^y-rrzⁱ* with the type A EASTWARDS preverb *k^y-* and the verb
 27370 *rrzⁱ* ‘stay’ can either be analyzed as an 2SG imperative ‘stay!’ or as a 3SG Aorist ‘he
 27371 stayed’. However, four additional morphological marks can help disambiguating
 27372 between the two categories in some contexts.

27373 First, Aorist selects stem II (§12.2.1), and Imperative stem III (§12.2.2, §21.1.2).
 27374 Second, transitive verbs in Aorist take type C preverbs instead of type A. Third,
 27375 the *-t* past tense suffix is found in the Aorist, but not in the Imperative (§21.1.3).
 27376 Fourth, the rules of vowel contraction (§12.3) are different across TAME cate-
 27377 gories: the contracting vowel of the stem merges with the preverb as *Ca-* in the
 27378 Aorist and Past Imperfective, and as *Cy-* in the Imperative and the Irrealis. For in-
 27379 stance, a contrast can be observed between the 3SG Aorist /kamdz^u/ (*k^y-amdzu*,
 27380 AOR-sit) ‘s/he sat down’ and the 2SG Imperative /kyamdz^u/ (*k^y-yamdz^u*, IMP-sit)
 27381 ‘sit!’.

27382 Syncretism occurs in the cases of verbs whose lexical orientation is WEST-
 27383 WARDS and EASTWARDS, the Imperfective of such verbs is identical to the Ego-
 27384 phoric Present or Dubitative on the one hand, and the Sensory on the other
 27385 hand (except in specific contexts, see §13.1.1, §22.5.1.2). For instance, the form

27386 *ku-omdzui-a* of the verb *amdzui* ‘sit’, which takes the EASTWARDS preverbs, can ei-
 27387 ther be analyzed as Imperfective (IPFV-sit-1SG) or Egophoric Present (PRS-sit-1SG)
 27388 depending on the context.

27389 Likewise, verbs selecting the DOWNWARDS orientation have Aorist and Infer-
 27390 riental forms that are identical to their Past Imperfective and Inferential Imper-
 27391 perfective forms, respectively. Given the constraints on the occurrence of the non-
 27392 periphrastic Past Imperfective (§21.5.3), however, such cases are much rarer.

27393 21.1.1.3 Orientation preverbs and aspect

27394 The Past Imperfective and Inferential Imperfective preverbs *pui-* and *pjy-* corre-
 27395 spond to the DOWNWARDS preverbs of series A and D, respectively. The grammat-
 27396 icalization process from ‘downward’ orientation to imperfective has occurred
 27397 (probably independently) in all core Gyalrong languages, and is discussed in de-
 27398 tail in Lin (2011).

27399 There are two additional less grammaticalized cases of orientations used with
 27400 a specific aspectual meaning, and overriding the intrinsic orientation of the verb.

27401 First, the DOWNSTREAM orientation occurs with stative verb to express pro-
 27402 gressive change of state occurring naturally, in particular to describe the growth
 27403 of plants and animals (§15.1.5.5). This usage is common with the adverb *zuruzyri*
 27404 ‘progressively’, and is observed across various TAME categories, including for
 27405 instance the Inferential (1), the Imperfective (2, 3) and the Aorist (3). The verbs
 27406 *mtsʰyt* ‘be full’, and *wxti* ‘be big’ normally select the UPWARDS orientation (see
 27407 example 118, §15.1.5.5), and *yurni* ‘be red’ the WESTWARDS orientation.

- 27408 (1) *nui-muj* *nura zuruzyri cʰy-mtsʰyt*
 3PL.POSS-feather DEM:PL progressively IFR:DOWNSTREAM-be.full
 27409 ‘Progressively, the (little birds) became full of feathers.’ (bailingniao he
 27410 xiaoniao, 9)
- 27411 (2) *qandze nui xtc i qʰe kui-xtcur-xtci ma*
 earthworm DEM be.small:FACT LNK SBJ:PCP-EMPH~be.small apart.from
 27412 *maje, taqaβ jamar ma maje tce zuruzyri*
 not.exist:SENS needle about apart.from not.exist:SENS LNK progressively
 27413 *cʰui-wxti nui-cti.*
 IPFV:DOWNSTREAM-be.big SENS-be.AFF
 27414 ‘The earthworm is small, only about as small as a needle, and then it
 27415 grows progressively.’ (25-akWzgumba, 123)

- 27416 (3) *zuruažyri tce c^hu-yurni tce*
 27417 progressively LNK IPFV:DOWNTREAM-be.red LNK
t^hu-yurni tce tce c^hu-tut ηu tce,
 27418 AOR:DOWNTREAM-be.red LNK LNK IPFV-be.ripe be:FACT LNK
 27419 ‘It progressively becomes red, and after it has become red it ripens.’
 (16-RIWmsWsi, 18)

27420 Second, the UPWARDS orientation in the Aorist overrides the lexical orientation
 27421 of stative verbs to indicate a point of temporal reference in temporal clauses. For
 27422 instance, the negative existential verb *me* ‘not exist’ (§15.1.5.7), whose intrinsic
 27423 orientation is WESTWARDS, occurs with the UPWARDS orientation as in (4) in the
 27424 meaning ‘when there is no...’ without inchoative aspect ‘when ... disappears’ as
 27425 is usually found in the Aorist (see also §21.5.1.4, Jacques 2014a: 283, fn 10).

- 27426 (4) *nuu ma tx-me tce nuu-p^huit-nuu*
 27427 DEM apart.from AOR:UP-not.exist LNK IPFV-take.out-PL
 27428 ‘When there is nothing else than than this, people cut it.’ (140427
 qamtsWrmdzu, 12)

27429 21.1.1.4 Orientation preverbs and evidentiality

27430 The Sensory *nuu-* and Egophoric Present *ku-* markers correspond to the WEST-
 27431 WARDS and EASTWARDS preverbs of series B, respectively. It is unlikely that a
 27432 pair of preverbs encoding the solar dimension (§15.1.3.3) was directly grammaticalized
 27433 to express an evidential contrast.

27434 However, an extended function of the EASTWARDS/WESTWARDS contrast is the
 27435 expression of centripetal vs. centrifugal orientation (§15.1.4.3). The centripetal
 27436 meaning of the EASTWARDS orientation goes back at least to proto-Gyalrong,
 27437 since it is attested in Situ, and the metaphorical use of centripetal/cislocative
 27438 marker to express speaker affectedness could have been further grammaticalized
 27439 as an egophoric marker.

27440 21.1.2 Stem alternation

27441 Stem alternation (§12.2) has a lower functional load than preverbs to encode
 27442 TAME, since stem II is only attested on a handful of irregular verbs (§12.2.1) and
 27443 stem III, although found on an important number of transitive verbs (§12.2.2.1),
 27444 is restricted to only a small subset of the paradigms, as it marks both TAME and
 27445 person/number (§12.2.2.2).

Three cases of systematic redundancy between stem alternation and orientation preverbs are observed. First, stem III alternation is redundant as a TAME marker (but not as a transitivity marker, §14.3.1) with B type preverbs in the Imperfective, the Sensory and the Egophoric. Second, in 3→3' configurations, stem II and C type preverbs redundantly mark Aorist (§12.2.1). Third, stem III is redundant with the contrast between A and C type preverbs to distinguish between Imperfective and Aorist forms in the case of transitive verbs; taking *ndza* ‘eat’ as an example of an alternating transitive verb, its 2SG→3 Imperative *tr-ndze* ‘eat it!’ (stem III, A preverb) differs from its 3SG→3’ Aorist *ta-ndza* ‘s/he ate it’ (base stem, C preverb) by both the preverbs and the stems.

Since intransitive verbs lack the contrast between A and C type preverbs (and also stem III), stem II is the only clue to disambiguate between the third person Aorist and Imperative, which are both marked by A type preverbs: for instance, while non-alternating verbs such as *rɔzi* ‘stay’ have ambiguity between these two forms (§21.1.1.2), irregular alternating verbs such as *ce* ‘go’ make a clear distinction between Aorist 3SG (*jy-ari* AOR-go[II] ‘s/he went’) and Imperative 2SG (*jy-ce* IMP-go ‘go!’) and the corresponding dual and plural forms. It is the only case when stem alternation is critical to distinguish between two TAME categories.

21.1.3 Other affixes

Aside from preverbs and stem alternation, formatives used to mark primary TAME categories are few.

The negative prefixes (slot -5, §11.2.1) have different forms depending on TAME categories, and one of them, the Sensory Negative *muíj-* (§13.1.1) is a portmanteau encoding both polarity and TAME.

The Past Transitive *-t* (slot +1, -z in some dialects of Japhug, §11.3) is a secondary exponent of some TAME categories, only found in the 1/2sg→3 person configurations (§14.3.2.1) of Aorist, Perfective and Imperfective Inferential, Past Imperfective (§21.5) and Apprehensive (§21.7.1.1), unless the Progressive *asu-* is also present (§21.6.1.1).

The prefix *a-* in slot -6 (§11.2.1) is the main marker of the Irrealis (§21.4.1.1), together with type A preverbs and (when applicable) stem III.

Secondary TAME categories (§21.6, §21.7) are encoded by several prefixes in slots -6 and one in -1 (the Progressive §21.6.1).

21.1.4 Evidentiality and person

As in many languages with evidential systems (Sun 2018), person and evidentiality present some degree of interaction in Japhug.

27482 The Sensory (§21.3.2) and Inferential (§21.5.2) have restrictions on the use of
 27483 first person in declarative clauses. First person subjects are not impossible, but
 27484 have very specific meanings (see §21.3.2.6 and §21.5.2.3).

27485 The Egophoric Present, on the other hand, is not compatible with second per-
 27486 son in declarative clauses, and with first person in interrogative ones.

27487 Like most languages of the Tibetosphere, interrogatives sentences generally
 27488 adopt the perspective of the addressee rather than that of the speaker, causing
 27489 a phenomenon referred to as ‘anticipation rule’ (Tournadre & LaPolla 2014: 244)
 27490 or ‘flipping’ (San Roque et al. 2017): the speaker anticipates the answer of the
 27491 addressee and uses the form that he expects the addressee will choose to respond
 27492 to the question. For instance, in example (5), the speaker uses the Factual because
 27493 she expects an answer with the Factual such as *suz-a* (know:FACT-1SG) ‘I know’.

- 27494 (5) *nɔj ui-túi-suz?*
 27495 2SG QU-2-know:FACT
 ‘Do you know it?’ (19 GzW, 8)

27496 As a result of this change of perspective, compatibilities between evidential
 27497 markers and first vs. second person are always reversed between declarative and
 27498 interrogative sentences (§21.3.3.2).

27499 The addressee perspective however is not a syntactic rule. The addressee is free
 27500 to adopt the evidential form suggested by the speaker who asked the question, or
 27501 to choose another form if he sees fit: see Garrett & Bateman (2007) for an account
 27502 of this phenomenon in Tibetan. It is also possible to have in the same question
 27503 two verbs referring to the addressee with the Egophoric Present in one case and
 27504 the Sensory in the other, as in (6).

- 27505 (6) *wo, ui-kú-tui-pe, ui-nú-tui-cʰa?*
 27506 INTERJ QU-EGOPH-2-be.good QU-SENS-2-be.fine
 ‘Are you feeling well, are you fine?’ (140425 shizi huli he lu-zh, 16)

27507 21.2 Imperfective

27508 The Imperfective is one of the most common finite verb forms in Japhug, but
 27509 rarely appears on its own without an auxiliary verb. It mainly occurs in pe-
 27510 ripheral TAME constructions (§21.2.2) and subordinate clauses (§21.2.3, §21.2.4).
 27511 A specific hortative function (§21.2.5) has developed from its use in complement
 27512 clauses with a modal auxiliary. In addition, verbs of perceptions are used in the
 27513 Imperfective in specific contexts (§21.2.7).

27514 21.2.1 Morphology

27515 The Imperfective selects type B preverbs (§21.1.1.1, §15.1.1.1), and stem III (§12.2.2.1,
 27516 §21.1.2) when appropriate. The preverb orientation is not neutralized. Table 21.3
 27517 shows the Imperfective 3SG→3' and 3PL→3' forms of some transitive verbs, illus-
 27518 trating all six orientation preverbs and alternation between stem III (in 3SG→3')
 27519 and stem I (in 3PL→3').

Table 21.3: Examples of Imperfective verb forms (3→3' transitive config-
 27520urations)

Verb	Orientation	Imperfective
<i>ndza</i> 'eat'	UPWARDS	<i>tu-ndze, tu-ndza-nuu</i>
<i>ko</i> 'prevail over'	DOWNWARDS	<i>pjui-kym, pjui-ko-nuu</i>
<i>ly</i> 'dig'	UPSTREAM	<i>lu-lye, lu-lya-nuu</i>
<i>βlu</i> 'burn'	DOWNSTREAM	<i>cʰu-βli, cʰu-βluu-nuu</i>
<i>ndo</i> 'take'	EASTWARDS	<i>ku-ndym, ku-ndo-nuu</i>
<i>suso</i> 'think'	WESTWARDS	<i>jnu-susym, jnu-suso-nuu</i>

27520 Table 21.4 presents the Imperfective paradigms of the transitive verb *ndza* 'eat'
 27521 (UPWARDS) and of the intransitive contracting verb *amdzuu* 'sit' (EASTWARDS), with
 27522 vowel contracting of the preverb and the vowel of the stem in the first and third
 27523 person subject forms.

27524 Verbs selecting the EASTWARDS or WESTWARDS orientation (§15.1.3.3, §15.1.4.3,
 27525 §15.1.5) present syncretism between Imperfective on the one hand, and Egophoric
 27526 Present or Sensory on the other hand. For instance, the 3SG→3' form *jnu-susym*
 27527 of the verb *suso* 'think' (which requires the WESTWARDS preverbs), can either be
 27528 Imperfective or Sensory (§21.3.2.1, §21.2.6). Similarly, the 1SG forms *ku-ryzi-a* and
 27529 *ku-omdzuu-a* of the verbs *ryzi* 'stay' and *amdzuu* 'sit' (whose lexical orientation is
 27530 EASTWARDS, see Table 21.4), can be Imperfective or Egophoric Present (§21.3.3.1).

27531 Verbs selecting other orientations do not have such ambiguity; for instance,
 27532 the verb *ryma* 'work' (selecting UPWARDS orientation) has different Imperfec-
 27533 tive, Egophoric Present and Sensory forms: *tu-ryma, ku-ryma* and *jnu-ryma*, re-
 27534 spectively.

27535 21.2.2 Use in periphrastic TAME categories

27536 Periphrastic TAME categories with a main verb in the Imperfective are used to
 27537 express habitual or ongoing actions. In these constructions, the main verb ex-

Table 21.4: Examples of Imperfective paradigms

1SG(→3')	<i>tu-ndze-a</i>	<i>ku-omdzuu-a</i>
1DU(→3')	<i>tu-ndza-tci</i>	<i>ku-omdzui-tci</i>
1PL(→3')	<i>tu-ndza-j</i>	<i>ku-omdzui-j</i>
2SG(→3')	<i>tu-tuu-ndze</i>	<i>ku-tuu-ymdzuu</i>
2DU(→3')	<i>tu-tuu-ndza-ndzi</i>	<i>ku-tuu-ymdzuu-ndzi</i>
2PL(→3')	<i>tu-tuu-ndza-nuu</i>	<i>ku-tuu-ymdzuu-nuu</i>
3SG(→3')	<i>tu-ndze</i>	<i>ku-omdzuu</i>
3DU(→3')	<i>tu-ndza-ndzi</i>	<i>ku-omdzuu-ndzi</i>
3PL(→3')	<i>tu-ndza-nuu</i>	<i>ku-omdzuu-nuu</i>
1→2SG	<i>tu-ta-ndza</i>	
2SG→1SG	<i>tu-kuu-ndza-a</i>	
3'→3SG	<i>tú-wy-ndza</i>	

27538 presses person/number and aspect, while the copula encodes tense, modality
 27539 and evidentiality.

27540 The examples in (7) (with the verb *ndza* ‘eat’ in the 3SG→3’ configuration) il-
 27541 lustrate attested possibilities. With a copula in the Factual Non-Past *ŋu* (7a) or
 27542 in the Sensory *jnu-ŋu* (7b), the periphrastic construction has a non-past mean-
 27543 ing with an evidential contrast between non-Sensory and Sensory (there is no
 27544 Periphrastic Egophoric). When the copula is in the Past Imperfective *pua-ŋu* or
 27545 in the Inferential Imperfective *pjr-ŋu*, the interpretation is that of a past habitual
 27546 ‘used to X’ or a Past progressive (§21.5.3.5). Additional periphrastic constructions
 27547 are also attested with Secondary Modal prefixes on the copula (§21.7).

- 27548 (7) a. *tu-ndze ŋu*
 IPFV-eat[III] be:FACT
 ‘S/he/it eats it/is eating it.’ (Periphrastic Imperfective)
- 27549 b. *tu-ndze jnu-ŋu*
 IPFV-eat[III] SENS-be
 ‘S/he/it eats it/is eating it.’ (Periphrastic Sensory)
- 27550 c. *tu-ndze pua-ŋu*
 IPFV-eat[III] PST.IPFV-be
 ‘S/he/it used to eat it/was eating it.’ (Periphrastic Past Imperfective)

- 27554 d. *tu-ndze pjy-ŋu*
IPFV-eat[III] IFR.IPFV-be
27555 'S/he/it used to eat it/was eating it.' (Periphrastic Inferential
27556 Imperfective)
- 27557 e. *tu-ndze a-puu-ŋu*
IPFV-eat[III] IRR-IPFV-be
27558 'If s/he eats it...' (Periphrastic Irrealis)

27559 In these constructions, the copula never takes any person/number indexation
27560 markers or associated motion, which can only be found on the main verb. For instance, in (8), the 1SG indexation suffix *-a* can only occur on *tu-ndze-a*, and putting
27561 it on the copula *ŋu* here is categorically rejected (although the copula *ŋu* 'be' is
27562 compatible with indexation affixes, §14.2.3)

- 27564 (8) *tɣ-mt^hum tu-ndze-a puu-ŋu ri,*
INDEF.POSS-meat IPFV-eat[III]-1SG PST.IPFV-be LNK
27565 'I was eating the meat.' (150909 qandZGi, 5)

27566 Negation can be expressed in these constructions by using the suppletive ne-
27567 gative copula *maš* 'not be' (§13.1.2, §13.2, §22.5.3.1), as in (9).

- 27568 (9) *ma lonba tuturca tu-myrm puu-maš.*
LNK all together IPFV-hurt PST.IPFV-not.be
27569 '(My whole head) was not hurting all at the same time.' (24-pGArtsAG, 77)

27570 Chains of verbs in the Imperfective can share the same copula, which appears
27571 at the end, following the last verb. In (10), the Inferential Imperfective copula
27572 *pjy-ŋu* has scope over no less than ten verbs in the Imperfective (marked in red),
27573 sharing the same subjects and expressing a list of actions repeatedly occurring in
27574 a particular order every day (the first verb *ku-rtoš* 'he saw that..' does not belong
27575 to this chain, see §21.2.7). One verb in the Aorist (marked in blue) appears in the
27576 middle of the Imperfective chain to set a point of temporal reference 'when they
27577 reach (the ground)'.

- 27578 (10) *ku-rtoš tcendyre spikuku zo qro χsum pjw-ŋi-nu*
IPFV-look LNK everyday EMPH pigeon three IPFV:DOWN-come-PL
27579 *tce tumunymk^ha zuu pjw-nu-łor-nu* tce tce
LNK heaven LOC IPFV:DOWN-AUTO-come.out-PL LNK LNK
27580 *uu-t^bor puu-azyut-nu* tce, ci *nw-zyy-syphyr-nu*
3SG.POSS-ground AOR:DOWN-reach-PL LNK a.little IPFV-REFL-shake-PL

27581 *tce, tce qro w-n̥dži n̥u p̥jua-qab-n̥u tce, w̥zoz*
 LNK LNK pigeon 3SG.POSS-skin DEM IPFV-peel-PL LNK apart

27582 *n̥u-ta-n̥u tce, w-ŋgu tce^heme kua-mp̥c̥w~mp̥c̥yr*
 IPFV:WEST-put LNK 3SG.POSS-inside girl SBJ:PCP-EMPH~be.beautiful

27583 *zo x̥sum n̥tsu n̥u-n̥u-čoč* *tce*
 EMPH three always IPFV:WEST-AUTO-come.out LNK

27584 *lu-n̥ytsob-n̥u* *tce, tce turmučk^ha tce li n̥kinu*
 IPFV-collect.Potentilla.anserina LNK LNK evening LOC again FILLER

27585 *tytsob* *n̥u tu-n̥u-ndo-n̥u* *zara qro w-n̥dži*
 Potentilla.anserina DEM IPFV:UP-AUTO-take-PL 3PL pigeon 3SG.POSS-skin

27586 *w-ŋgu n̥u tu-n̥u-ŋga-n̥u tce tce n̥u-z̥y̥-syp^hyr-n̥u q^he*
 3SG.POSS-in DEM IPFV-AUTO-wear-PL LNK LNK IPFV-REFL-shake-PL LNK

27587 *tce ci w-q^hu ci zo turmučymk^ha nutču*
 LNK one 3SG.POSS-after one EMPH heaven DEM:LOC

27588 *tu-cq^hlyt-n̥u* *ntsua p̥jr-ŋu.*
 IPFV:UP-disappear-PL always IFR.IPFV-be

27589 'He saw that everyday, three pigeons would come down from heavens,
 and as they reached the ground, they would shake themselves, shed the
 pigeon skins and put it a aside, and three beautiful girls would come out
 from (the skins), they would collect *Potentilla anserina*, and in the
 evening, they would take the *Potentilla*, wrap themselves in their pigeon
 skin, shake themselves and disappear in heavens one after the other.'

27590 (07-deluge, 31-38)

27596 Aside from the habitual and progressive meaning in (7a), the combination of a
 main verb in Imperfective with a copula in the Factual Non-Past can also express
 imminent future, as in (11) and (12). In (11), it also appears in the apodosis of a
 conditional construction to express the result if the condition in the protasis is
 verified.

- 27601 (11) *c-tu-ru-a ŋu tce, turme n̥u~n̥u-ŋu ny,*
 TRAL-IPFV:UP-look-1SG be:FACT LNK human COND~SENS-be ADD

27602 *a-ku, nyki, tu-syŋobŋob-a ŋu tce tr-yi,*
 1SG.POSS-head FILLER IPFV-nod-1SG be:FACT LNK IMP:UP-come

27603 'I am going to have a look, and if it is a human, I will nod and you can
 come (to eat him).' (2012 khu, 48-49)

27604

- 27605 (12) *wo a-mu ma-pur-tur-zyy-sat tce azo*
 INTERJ 1SG.POSS-mother NEG-IMP-2-REFL-kill LNK 1SG
 27606 *pju-nuu-yi-a nyu*
 IPFV:DOWN-VERT-come-1SG be:FACT
 27607 'Mother, don't commit suicide, I am coming back.' (2003 kAndzwsqhaj2,
 27608 26)

27609 In (13), the Imperfective verb *yuu-ju-re-a* refers to an event expected to occur
 27610 several years in the future. However, this is still analyzable as an imminent future,
 27611 as this action is to take place immediately after the point of future temporal
 27612 reference expressed by the verb *jy-nuuye-a* in the Aorist (§21.5.1.4).

- 27613 (13) *kuki tuu-tc^hyyduu ki nyzo uu-puu ty-pe*
 DEM.PROX one-jar DEM.PROX 2SG 3SG.POSS-safekeeping IMP-do[II]
 27614 *tce, azo jy-nuu-ye-a tce tce yuu-ju-re-a nyu*
 LNK 1SG AOR-VERT-come[II]-1SG LNK LNK CISL-IPFV-fetch[III]-1SG be:FACT
 27615 'Keep this jarful (of olives for me while I am gone), when I come back I
 27616 will come and take it back.' (140516 yiguan ganlan-zh, 24-25)

27617 The existence of Periphrastic TAME categories, in addition to the primary and
 27618 secondary categories, makes the Japhug TAME system extremely complex. At
 27619 the present stage of my knowledge of the language, the semantic differences
 27620 between some categories still eludes me.

27621 For instance, the (Primary) Sensory and the Periphrastic Sensory can both ex-
 27622 press habitual or generic actions, as in (14) where both forms appear redundantly
 27623 (with tail-head linkage, §25.1.7).

- 27624 (14) *tce ma nuunu dudut nuu kuu tcyom kunu puu-ndze.*
 LNK LNK DEM dove DEM ERG xanthoxylum also SENS-eat[III]
 27625 *tcyom kunu puu-ndze tce tu-ndze puu-nyu,*
 xanthoxylum also SENS-eat[III] LNK IPFV-eat SENS-be
 27626 *pju-kre puu-nyu.*
 IPFV-cause.to.fall[III] SENS-be
 27627 'The dove also eats xanthoxylum. It also eats xanthoxylum, and makes it
 27628 fall (from the tree).' (22-CAGpGa, 32-33)

27629 There is overlap between the use of postverbal copulas in the periphrastic
 27630 TAME constructions and their function as focus marker (§13.2, §22.5.3.2). In (15),
 27631 the negative copula *mas* and the emphatic affirmative *cti* are used both to build
 27632 the Periphrastic Imperfective, and to express contrastive focus on the dative re-
 27633 cipient.

- 27634 (15) *nvzo ny-p^he tu-ti-a mab, pynmawombyr u-p^he*
 2SG 2SG.POSS-DAT IPFV-say-1SG not.be:FACT ANTHR 3SG.POSS-DAT
 27635 *tu-ti-a cti*
 IPFV-say-1SG be.AFF:FACT
 27636 ‘I am not saying it to you, I am saying it to Padma ’Od’bar.’ (Norbzang
 27637 2005, 190)

21.2.3 Use in temporal clauses

27639 Chains of verbs in the Imperfective without subordinating relation, but possibly
 27640 sharing a tense-marking copula, can indicate a succession of events, as in (10)
 27641 above. The Imperfective also occurs in subordinate temporal clauses expressing
 27642 precedence or simultaneous action.

27643 Temporal clauses of temporal precedence headed by the postposition *cunggu*
 27644 ‘before’ (§8.2.11, §25.3.2.1, Jacques 2014a: 286–287) require the Imperfective, to the
 27645 exclusion of all other finite and non-finite verb forms. In (16) and (17) for instance,
 27646 only *lu-fso* and *ku-lxt* can occur with *cunggu*, and neither infinitive (§16.2) or
 27647 Aorist forms (§21.5.1) are possible, regardless of the TAME form of the verb of
 27648 the main clause (Inferential in 16, Past Imperfective in 17).

- 27649 (16) *tce nuu ur-fso lu-fso* *cunggu q^he li nura*
 LNK DEM 3SG.POSS-tomorrow IPFV-be.bright before LNK again DEM:PL
 27650 *c-to-stu.*
 TRAL-IFR-do.like
 27651 ‘The next day, before the day broke, he went (there) and did like (she had
 27652 said).’ (28-smAnmi, 356)
- 27653 (17) *tuu-muu ku-lxt cunggu nuu u-tur-sy-cke*
 INDEF.POSS-sky IPFV-release before DEM 3SG.POSS-NMLZ:DEG-PROP-burn
 27654 *pnu-saxa^h* *zo*
 PST.IPFV-be.extremely EMPH
 27655 ‘Before it rained, it was very hot.’ (conversation, 17-09-2018)

27656 In temporal clauses with *u-k^huk^ha* ‘while’, Imperfective express an action oc-
 27657 curring simultaneously with that of the main clause, as in (18) and (19). However,
 27658 unlike *cunggu*, *u-k^huk^ha* does not select the Imperfective and other finite TAME
 27659 forms are possible (§25.3.4.2).

- 27660 (18) *azo pjui-ta-suixcyt u-k^huk^ha lu-ta^h-a ny*
 1SG IPFV-1→-teach 3SG.POSS-while IPFV-weave be:FACT
 27661 ‘I am teach you (how to weave) and weaving at the same time.’ (elicited)

- 27662 (19) *q^he u-puu tuu-nuu jnuu-jts^{hi} u-k^huak^ha,*
 LNK 3SG.POSS-young INDEF.POSS-breast IPFV-give.to.drink 3SG.POSS-while
 27663 *uu-ku kuura tu-ste tce zruay ra*
 3SG.POSS-head DEM.PROX:PL IPFV-do.like[III] LNK louse PL
 27664 *pjuu-re jnuu-ηu. tce zruay nuara tu-ndze jnuu-ηu.*
 IPFV-pick.off[III] SENS-be LNK louse DEM:PL IPFV-eat[III] SENS-be
 27665 ‘While (the monkey mother) breastfeeds her young, she does like this on
 27666 its head at the same time and picks lice off. Then she eats the lice.’
 27667 (19-GzW, 36-38)

27668 21.2.4 Use in complement clauses

27669 The Imperfective is common in complement clauses, in particular with modal
 27670 verbs. In such clauses, no auxiliary copula is required.

27671 Imperfective occurs in S-complement clauses with modal verbs such as *ra* ‘be
 27672 needed’, ‘be necessary’ (20, 21), *jyy* ‘be allowed’ (22), *nts^{hi}* ‘be better’ and *k^hu* ‘be
 27673 possible’.

- 27674 (20) *atu pyytcu nua pjúu-wy-sat jnuu-ra*
 up.there bird DEM IPFV-INV-kill SENS-be.needed
 27675 ‘One has to kill the bird upstairs.’ (2003kongzong, 364)

- 27676 (21) *pjuu-tuu-yi my-ra*
 IPFV:DOWN-2-come NEG-be.needed:FACT
 27677 ‘You don’t have to come down (with us).’ (heard in context)

- 27678 (22) *tu-kui-qur-a úr-jyy*
 IPFV-2→1-help-1SG QU-be.possible:FACT
 27679 ‘Could you help me?’ (150901 dongguo xiansheng he lang-zh, 34)

27680 The aspectual auxiliary *ŋgryl* ‘be usually the case’ (§24.5.6.4) most often selects
 27681 a complement in the Imperfective, expressing recurring actions or situations, as
 27682 in (23).

- 27683 (23) *qala kui nuara kui-fse βlaβlu tu-βze*
 hare ERG DEM:PL SBJ:PCP-be.like trick IPFV-do[ILI]
 27684 *pjy-ŋgryl.*
 IFR.IPFV-be.usually.the.case
 27685 ‘The hare used to do tricks like that.’ (31-qala, 82)

27686 The Imperfective is also found in object or semi-object complement clauses
 27687 with modal verbs such as *spa* ‘be able to’ (24) or *cʰa* ‘can’ (example 213, §21.5.2.4).

- 27688 (24) *nua-krym* *múj-spe* *qhe, tcendyre nunu u-pui*
 27689 IPFV-share[III] NEG:SENS-be.able[III] LNK LNK DEM 3SG.POSS-young
tui-rdoꝝ nua kui [...] tu-nua-ndym *qhe, uzo stuasti zo*
 27690 one-piece DEM ERG IPFV-AUTO-take[III] LNK 3SG alone EMPH
tu-nui-ndze *nua-ŋu*
 27691 IPFV-AUTO-eat[III] SENS-be
 27692 ‘(The mother cat) does not know how to share (the food she has brought
 27693 for her kitten equally), one of the kitten takes (the whole) and eats it
 27694 alone (without giving anything to its mother or the other kitten).’
 (21-IWLU, 81)

27695 Imperfective complement clauses are found with main verbs in all primary
 27696 TAME categories, including perfective ones like Inferential (example 213, §21.5.2.4)
 27697 or the Aorist.

27698 21.2.5 Hortative

27699 The Imperfective used without any copula or auxiliary can have a hortative mean-
 27700 ing similar to the one it has when combined with a modal auxiliary such as *ra*
 27701 ‘be needed’ or *ntsʰi* ‘be better’ (§21.2.4).

27702 The hortative function occurs in first person subject forms, with either transi-
 27703 tive or intransitive verbs (25).

- 27704 (25) *ku-zyrctʰuz-a* *ma zduxpa*
 27705 IPFV-reveal.one's.true.nature-1SG LNK poor.of
 ‘Let me show him who I am, poor of him.’ (2003kandzwsqhaj, 146)

27706 It is also found instead of the Imperative in the 2→1 configurations (26, 27, 28,
 27707 29), since the Imperative only allows 2→3 forms (§21.4.2.1).

- 27708 (26) *ku-kui-nxjo-a* *je*
 27709 IPFV-2→1-wait-1SG SFP
 ‘Wait for me!’ (heard in context)

- 27710 (27) *ju-kui-tsuum-a* *wo, a-wi*
 27711 IPFV-2→1-take.away-1SG SFP 1SG.POSS-grandmother
 27712 ‘Take me away with you, grandmother!’ (140519 mai huochai de xiao
 nvhai-zh, 160)

- 27713 (28) *nui-me* *nui-kui-mbi-a-nui* *ma azo-sti* *ky-nui-ce*
 3PL.POSS-daughter IPFV-2→1-give-1SG-PL LNK 1SG-alone INF-VERT-go
 27714 *my-c^ha-a*
 NEG-can:FACT-1SG
 27715 'Give me you daughter, I cannot go back there alone.' (02-deluge2012, 108)
- 27716 (29) *u-nui-nukumata^h-a* *ny nui-kui-sui-βzjfur-a*
 QU-IPFV-make.a.mistake-1SG ADD IPFV-2→1-CAUS-correct-1SG
 27717 'If I make a mistake (when speaking), correct me.' (elicited)

27718 The hortative meaning of the Imperfective occurs in three main contexts: (i)
 27719 when the clause containing the verb in the Imperfective followed by a causal
 27720 clause, with the linker *ma* in between, as in (25) and (28); (ii) when the verb is
 27721 followed by the sentence final particle *wo* (§10.4.1), as in (27); (iii) in the apodosis
 27722 of conditional constructions (29).

27723 21.2.6 Inchoative

27724 With stative verbs, like the Aorist (§21.5.1) and the Inferential (§21.5.2) the Imperfective
 27725 always expresses ongoing change, whether it appears in main clauses in
 27726 a Periphrastic tense (30), or in a complement clause (31).

- 27727 (30) *t^hui-tut ri tce c^hui-wyrum nui-ŋu.*
 AOR-be.ripe LNK LNK IPFV-be.white SENS-be
 27728 'When it ripens, it becomes white.' (16-CWrNgo, 165)
- 27729 (31) *nua kumy c^hui-myci-ndzi mui-pjy-c^ha-ndzi*
 DEM also IPFV-be.rich-DU NEG-IFR.IPFV-can-DU
 27730 'Despite (their hard work), they could not become rich. (divination 2003,
 27731 7)

27732 This inchoative meaning often appears with initial reduplication of gradual
 27733 increase (§12.4.1.4), as in (32).

- 27734 (32) *zuruwzryi tce tcendyre ui-skyt nua tu~tu-mpcyr*
 progressively LNK LNK 3SG.POSS-voice DEM INCR~IPFV-be.beautiful
 27735 *zo ŋu*
 EMPH be:FACT
 27736 '(As it grows bigger, the rooster's) voice progressively becomes more and
 27737 more beautiful.' (22-kumpGa, 74)

Verbs selecting the WESTWARDS or EASTWARDS preverbs as intrinsic orientations have syncretism between Imperfective on the one hand, and Sensory or Egophoric Present on the other hand (§21.2.1). For instance, the form *juu-jas* is (inchoative) Imperfective in (33), and (stative) Sensory in (34) (illustrating the comparative use of the Sensory, §21.3.2.5). The only formal difference between them is the presence of the auxiliary *ju* in (33).

- (33) *pui-rom tce tce juu-jas zo ju*
 AOR-be.dry LNK LNK IPFV-be.black EMPH be:FACT
 ‘When (the puffball mushroom) dries, it becomes black.’ (22-BlamajmAG, 75)
- (34) *tce ui-jme numuu kuu juu-jas*
 LNK 3SG.POSS-tail DEM ERG SENS-be.black
 ‘It tail is more black.’ (23-qapGAmtWmtW, 60)

21.2.7 Perception verbs

The verbs *rto* ‘look’ and *syo* ‘listen’, which normally express volitional perception, occur in the Imperfective in an unusual construction which has three main characteristics.

First, the object or semi-object (§14.5.3) of the verb is non-overt, and cataphorically refers to the immediately following clause(s), which describe(s) the perceived event, as in (35). These clauses are in coordinating relationship with the clause of the perception verb, and are not subordinate complement clauses (§24.4.4).

- (35) *ui-zda ra kuu ku-rto-nuu tce, [numuu rdystas*
 3SG.POSS-companion PL ERG IPFV-look-PL LNK DEM stone
 ny-k-yβzu rcanuu], wuma zo pjy-pjyt-nuu
 IFR-PEG-become-PEG UNEXP:FOC really EMPH IFR-regret-PL
 ‘His companion saw that he had been turned to stone, and regretted very
 much (not having trusted him).’ (150902 hailibu-zh, 154-155)

Second, despite having an Imperfective form, the verbs can express a semelfactive perception (note in particular the presence of the adverb *slrwur* ‘suddenly’ in 36 below), rather than an ongoing or recurrent perception when the following clause is in the Aorist or in the Inferential (as in 35, 36, 37 and 38 below)

- 27766 (36) *spjan̥kua kuu blywur zo ku-rtob tce, kʰuna yur u-mke*
 wolf ERG suddenly EMPH IPFV-look LNK DOG GEN 3SG.POSS-neck
 27767 *nuitcu ɬmazgruβ ci pjy-mto juu-ŋu.*
 DEM:LOC scar INDEF IFR-see SENS-be
 27768 ‘The wolf suddenly saw (that there was) a scar on the dog’s neck.’ (140426
 27769 jiagou he lang-zh, 41-42)

27770 Third, the perception is non-volitional: the verbs in this construction can be
 27771 translated as ‘notice’ (of something unexpected), as shown by the fact that the
 27772 verb of non-volitional perception *mto* ‘see’ occurs in the following clause in (36)
 27773 to redundantly express the same perception event as *ku-rtob*.

27774 The clauses referring to the perceived event (shown in square brackets below)
 27775 in the Inferential either express actions that had taken place before the percep-
 27776 tion event, and whose results only are perceptible (§35, §38), or actions that are
 27777 immediately perceived as they occur (§37).

- 27778 (37) *a-wa kui-ruujyyt jny-ce ri, juu-syŋo tce,*
 1SG.POSS-father SBJ:PCP-go.to.toilets IFR:WEST-go LNK IPFV-listen LNK
 27779 *[u-tab nuitcu turme ci jny-yi]*
 3SG.POSS-up DEM:LOC man INDEF IFR:WEST-come
 27780 ‘My father had gone to toilets, and heard (there) that someone came
 27781 upstairs.’ (08-kWqhi, 11-12)

27782 The cataphoric object of the perception verb can comprise more than one
 27783 clause, as shown by (38).

- 27784 (38) *icqʰa kui-nuicxlymbuumbjom nuu cʰy-sta, [...] tcendyre*
 the.aforementioned SBJ:PCP-racing DEM IFR-wake.up LNK
 27785 *ku-rtob tce, [u-tuu-ci ri pjy-lwoɔ tce, tcendyre*
 IPFV-look LNK 3SG.POSS-INDEF.POSS-water also IFR-spill LNK LNK
 27786 *icqʰa nuu, tycime nuu ri kui-xrqʰuu~rqʰi zo jo-nuu-ce*
 FILLER DEM lady DEM also SBJ:PCP-EMPH~be.far EMPH IFR-AUTO-go
 27787 *cti] tce,*
 be.AFF:FACT LNK
 27788 ‘The racer woke up, and saw that his water had been spilled, and that the
 27789 princess had already gone far away.’ (140505 liuhaohan zoubian
 27790 tianxia-zh, 130)

27791 In this construction, the Imperfective forms *ku-rtob* and *juu-syŋo* can also refer
 27792 to generic or recurrent events if the following clause is in the Imperfective too,
 27793 as in example (10) above (§21.2.2).

27794 The Imperfective of perception should be distinguished from the regular uses
 27795 of the perception verbs *rtoʂ* ‘look’ and *sʂyo* ‘listen’ in the Imperfective. In (39) and
 27796 (40) for instance, the direct objects of the verb *rtoʂ* do not cataphorically refer to
 27797 the following clause, but rather to concrete entities (the leopard’s head in 39, two
 27798 birds in 40), and there is no non-volitional perception interpretation.

- 27799 (39) *tce kurtsʂy nunu u-ku* *nunu kú-wy-rtoʂ tce, lulu tsa*
 27800 LNK leopard DEM 3SG.POSS-head DEM IPFV-INV-look LNK cat a.little
 27801 *u-ts^huya fse,*
 27802 3SG.POSS-shape be.like:FACT
 ‘Looking at the leopard’s head, it seems a bit like that of the cat.’
 (27-qartshAz, 167)
- 27803 (40) *azo ndyre ku-rtoʂ-a* *pui-naxtcuyu-ndzi cti.*
 27804 1SG LNK IPFV-look-1SG SENS-be.the.same-DU be.AFF:FACT
 27805 ‘(When) I look at them (of two species of birds), they look the same.’
 (24-ZmbrWpGa, 5)

27806 The verb *ru* ‘look at’ occurs in construction similar to that described above for
 27807 *rtoʂ* ‘look’ and *sʂyo* ‘listen’ (§24.4.4) as in (41), but it keeps its volitional meaning
 27808 and is not exclusively found in the Imperfective.

- 27809 (41) *nyqa* *ky-ti* *ci* *tu* *tce, kuu-yrq^hi*
 27810 mushroom.sp OBJ:PCP-say INDEF exist:FACT LNK SBJ:PCP-be.far
 27811 *ju-kuu-ru* *tce, [salabonjboŋ tsa fse].*
 27812 IPFV-GENR:S/O-look.at LNK puffball a.little be.like:FACT
 ‘There is (a mushroom) caller *nyqa* (cow’s foot), when one looks at it from
 far away, it is a bit like a puffball.’ (22-BlamajmAG, 84)

21.3 Non-past categories

27813 This section discusses Factual Non-Past (§21.3.1), Sensory (§21.3.2) and Egophoric Present (§21.3.3), three TAME categories which have two commonalities. First, they almost always occur in sentences referring to Non-Past events (one exception is discussed in §21.3.2.7). Second, they do not have an inchoative meaning when used with stative verbs, unlike the Imperfective (§21.2.6). Like the Imperfective and the Modal categories, they select stem III in transitive direct configurations with singular subject and third person object (§12.2.2.2).

27821 Minimal pairs between these three categories can be found in specific contexts
 27822 (Jacques 2019a), and the tripartite evidential contrast between them is discussed
 27823 in §21.3.4.

27824 **21.3.1 Factual Non-Past**

27825 **21.3.1.1 Morphology and glossing**

27826 The Factual is the only finite TAM category in Japhug without an orientation
 27827 preverb and any other prefix in slot -3.¹ In the case of verbs without stem III
 27828 alternation (i.e. transitive verbs with a non-alternating rhyme and intransitive
 27829 verbs), it is realized as the bare stem. It selects the negative prefix *mr-* (§13.1.1).

27830 Complete paradigms of transitive and intransitive verbs in the Factual Non-
 27831 Past are presented in §14.3.2, and need not be repeated here.

27832 In spite of the absence of overt marking for most verbs, the gloss FACT is never-
 27833 theless always specified on verbs in the Factual in this grammar, whether or not
 27834 stem alternation occurs. This gloss is marked as a suffix (verb:FACT), rather than
 27835 as a prefix, to avoid confusion with derivational prefixes, since suffixes (§11.3) are
 27836 fewer than prefixes (§11.2), and also because stem III, which occurs in Factual
 27837 singular subject forms, is suffixed in origin (§12.2.2.1).

27838 The formation of the Factual is regular. However, the copula *ŋu* ‘be’ lacks an
 27839 Egophoric Present form (*†ku-ŋu-a* is not accepted, see §21.3.3), and it thus appears
 27840 that the preverbless forms of this verb are syncretic, analyzable either as Factual
 27841 or Egophoric Present (however, no attempt will be made at distinguishing those
 27842 two categories in the glosses).

27843 A few verbs, such as *kṛtupa* ‘tell’ and *mr-xsi* ‘it is not known’, cannot take
 27844 orientation preverbs and are only attested in the Factual (§14.3.4).

27845 Due to the absence of orientation preverbs, vowel contraction with prefixes
 27846 located before slot -3 (§11.2.1) only occur in first or third person forms of the
 27847 Factual (§12.3). Otherwise, contracting verbs surface with initial *a-* in Factual
 27848 Non-Past non-negative form.

27849 **21.3.1.2 Main clauses**

27850 The Factual has two main functions when used in an independent clause without
 27851 an auxiliary verb.

¹The term Factual', taken from Oisel's (2013) study of modern Lhasa Tibetan, corresponds to the category referred to as 'assertive' in older publications on Tibetan languages (Lhasa Tibetan *yod.pa.red*).

27852 First, in the case of stative verbs, whether adjectival stative verbs or existen-
 27853 tial verbs/copulas, the Factual is used to describe facts considered to belong to
 27854 everybody's common knowledge. Example (42) illustrates five examples of the
 27855 use of the Factual in this way, including copulas and adjectives. The Imperfec-
 27856 tive cannot occur in this function with stative verbs, since it has an inchoative
 27857 meaning (§21.2.6).

- 27858 (42) *tce kumpyt̚ci nuunu pyxt̚ci nuu-rca, kui-xt̚ci ci*
 LNK sparrow DEM bird 3PL-among SBJ:PCP-be.small INDEF
 27859 *zdobzdos yu tce, uizo xt̚ci ri wuma*
 IDEO:STAT:small.and.cute be:FACT LNK 3SG be.small:FACT but really
 27860 *zo cqrax tce ui-mjaꝝ u-rkuu nuunu ra*
 EMPH be.smart:FACT LNK 3SG:POSS-eye 3SG:POSS-border DEM PL
 27861 *kui-pas kui tú-wy-fskyr, nuu ui-tas ri, hanumi,*
 SBJ:PCP-be.black ERG IPFV-INV-surround DEM 3SG-on LOC a.little
 27862 *kui-xt̚ci~xt̚ci kui-yurni kui-fse tu,*
 SBJ:PCP-EMPH~be.small SBJ:PCP-be.red SBJ:PCP-be.like exist:FACT
 27863 *ui-xt̚pa nuu ra, ui-rqopa pjui-ze tce, nuu ra,*
 3SG:POSS-belly DEM PL 3SG:POSS-throat IPFV-begin[III] LNK DEM PL
 27864 *ui-jme muu-t^hui-nuu-lob myct̚sa nuu wyrum*
 3SG:POSS-tail NEG-AOR-AUTO-come.out until DEM be.white:FACT
 27865 ‘Among the birds, the sparrow is tiny and cute. Although it is small it is
 27866 very intelligent. Its eyes are surrounded by black (feathers), and above
 27867 that there are some red (dots). Its belly is white from the throat until the
 27868 tail.’ (22 kumpGatCW, 2-7)

27869 With dynamic verbs however, the Imperfective does occur to express general
 27870 knowledge, especially in generic forms (as in *tú-wy-fskyr* IPFV-INV-surround ‘it
 27871 surrounds it’ above) or with a dummy subject (S/A) (*pjui-ze* IPFV-begin[III] ‘it
 27872 begins’ above).

27873 The Factual also is also found in this function with dynamic verbs, in particular
 27874 when the subjects are overt and/or definite, as in (43).²

- 27875 (43) *ui-ku kui-mpui nuu pú-wy-p^buit tce, nuuna ra kui*
 3SG.POSS-head SBJ:PCP-be.soft DEM IPFV-INV-pluck LNK COW PL ERG
 27876 *ndza-nuu, pas kui my-ndze*
 eat:FACT-PL pig ERG NEG-eat:FACT
 27877 ‘One plucks the (leaves) on the extremities, the soft ones, the cows eat it,

²The Imperfective would also be possible here, however.

21 Tense, aspect, modality and evidentiality

27878 the pigs don't.' (06 qaZmbri, 20)

27879 Second, with dynamic verbs, the Factual can express immediate future. In as-
27880 ssertive sentences with first person subject (44), or in interrogative sentences with
27881 second person subjects (45), the Factual can be interpreted as indicating the in-
27882 tention to perform an action.

27883 (44) *ŋotcu tui-ce ny-qʰu~qʰu yi-a, ny-ŋga*
where 2-go:FACT 2SG.POSS-EMPH~after come:FACT-1SG 2SG.POSS-clothes

27884 *ny-xtsa fkur-a*
2SG.POSS-shoes carry:FACT-1SG

27885 'Wherever you go, I will go after you, I will carry your clothes and your
27886 shoes.' (26-kWlAGpopo, 37)

27887 (45) *mbarkʰom tʰyjtcu tui-yi?*
Mbarkham when 2-come::FACT

27888 'When are you coming to Mbarkham?' (Conversation, 2014)

27889 The Factual can also be used to express non-intentional future events when
27890 the speaker has reasonable reasons for assuming that they will take place as in
27891 (46).

27892 (46) *si-a ny-suso, tʰa yuu-sat-a ny-suso*
die:FACT-1SG IFR-think in.a.moment INV-kill:FACT-1SG IFR-think

27893 'He thought "I will die", he thought "It will kill me".' (Buxiejiang gaizuo
27894 yisheng-zh, 30)

27895 Verbs in the Factual in this function can be combined with the affirmative
27896 copula *cti* 'be' (47) to emphasize the certainty that the action will take place.

27897 (47) *tce tʰa yi cti ma, spikuku zo ju-yi*
in.a.moment come:FACT be:AFF:FACT LNK every.day EMPH IPFV-come

27898 *nuu-cti tce nuu ntsuu tu-ti nuu-cti*
SENS-be:AFF LNK DEM always IPFV-say SENS-be:AFF

27899 'It will come soon: it comes everyday and each times says this.' (qaCpa
27900 2003, 185-186)

27901 They are also compatible with sentence final particles of epistemic modality
27902 such as *tʰaj* 'maybe, probably' (48), which can be used to temper the degree of
27903 assertion.

- 27904 (48) *a-mu juymaur tce tci-scawa ye ma k^hu*
 1SG.POSS-mother today.evening LNK 1DU.POSS-poor.of SFP LNK tiger
 27905 *yi t^han ny*
 come:FACT SFP SFP
 27906 'Mother, poor of us, today evening the tiger is probably coming (for us).'
 27907 '(The tiger, 4)

21.3.1.3 Use in complement clauses

27909 The Factual is found in the complement clause of modal auxiliaries such as *ra* 'be
 27910 needed' and *jyy* 'be allowed', but occurrences are considerably fewer than those
 27911 of the Imperfective (§21.2.4). It is used to refer to actions just about happen at the
 27912 time of utterance (as in 49 and 50), rather than generic statements.

- 27913 (49) *nuna-j úr-jyy*
 rest:FACT-1SG QU-be.allowed:FACT
 27914 'Could we rest?' (2003 qachGa, 270)
- 27915 (50) *azō kuu-kaβ ce-a ra*
 1SG SBJ:PCP-scoop go:FACT-1SG be.needed:FACT
 27916 'I have to go to scoop water.' (2014-kWLAG, 69)

21.3.1.4 Use in Periphrastic TAME categories

27918 The Factual occurs in fewer Periphrastic TAME constructions than the Imperfec-
 27919 tive (§21.2.2).

27920 With the Past Imperfective *puu-ŋu* and Inferential Imperfective *pjy-ŋu* forms of
 27921 the copula *ŋu* 'be', it is used to build the Periphrastic Proximative (§21.6.2.1).

27922 Some speakers (in particular Kunbzang Mtsho) combine the Factual with the
 27923 Sensory *juu-ŋu* of the copula to express the same meaning as the Inferential in
 27924 narratives, notably with the verb *ti* 'say', where the constructions in (51) occurs
 27925 instead of *to-ti* (IFR-say) 's/he said' (§21.5.1.8).

- 27926 (51) '...' *ti juu-ŋu*
 say:FACT SENS-be
 27927 'S/he said: '...'' (many examples)

27928 This form may however not be Factual in the proper sense, but rather the trace
 27929 that *ti* 'say' (a highly irregular verb, §12.2.1.1) used to have irregular preverbless
 27930 forms (§15.1.1.5). The archaic form *k^hu-ti* 's/he said' provides additional support
 27931 for this idea (§21.5.4).

27932 21.3.2 Sensory

27933 21.3.2.1 Morphology

27934 The assertive Sensory form of regular verbs is build by combining the B type
 27935 WESTWARDS *jnu-* preverb with stem I or stem III depending on person and transitivity
 27936 (§12.2.2.2; stem II also occurs in one case, see 55 below). It is thus potentially
 27937 ambiguous with the Imperfective of verbs selecting WESTWARDS as their intrinsic
 27938 orientation. Examples (33) and (34) in §21.2.6 illustrate this syncretism between
 27939 Sensory and Imperfective.

27940 The negative Sensory is marked by the portmanteau prefix *múj-* (§13.1.1), differ-
 27941 ing from the negative Imperfective form *mu-jnu-* of verbs selecting the WEST-
 27942 WARDS preverbs. The *múj-* prefix is not compatible with contracting verbs (§12.3)
 27943 however: their negative Sensory form is *mu-jnu-*, as in (52).

- 27944 (52) *yzuut^huz ndyre, sujno tci muu-jnu-y-rtsi, si tci*
 27945 Selaginella LNK grass also NEG-SENS-PASS-count tree also
muu-jnu-y-rtsi.
 27946 NEG-SENS-PASS-count
 27947 ‘The selaginella can neither be counted as a species of grass, nor as a tree.’
 (16-RIWmsWsi, 98)

27948 The Sensory commonly appears in combination with the Progressive *jnu-ysuu-*
 27949 */jnu-ysz-* with transitive verbs. The negative form of the Sensory progressive is
 27950 *muu-jnu-* (53), like that of a contracting verbs.

- 27951 (53) *tua-muu pyjk^hu muu-jnu-ysuu-lxt ri, qale*
 27952 INDEF.POSS-sky yet NEG-SENS-PROG-release LNK wind
jnu-ysuu-βzu.
 27953 SENS-PROG-make
 ‘It is not yet raining, but there is wind.’ (conversation, 15-06-05)

27954 The Sensory form of the verb *ti* ‘say’ has stem I *jnu-ti* when occurring without
 27955 the Progressive (54), but unexpectedly selects stem II *jnu-ysu-tut, jnu-ys-tut* with
 27956 Progressive (55), which also presents the irregular allomorph -*ys-* (§21.6.1.1).

- 27957 (54) *nui kui-fse a-pa a-ma ni kui jnu-ti-ndzi*
 27958 DEM SBJ:PCP-be.like 1SG.POSS-father 1SG.POSS-mother DU ERG SENS-say-DU
tce
 27959 LNK
 ‘My parents are saying these things.’ (2003nyima2, 94)

- 27960 (55) *a-taŋ kua nua pua-vs-tuat*
 1SG.POSS-FZ ERG DEM SENS-PROG-say[II]
 27961 ‘My aunt is saying (those things).’ (2003 smanmi2, 147)

27962 The irregular existential verbs *yrru* ‘exist’ and *maje* ‘not exist’ are the supple-
 27963 tive Sensory forms of *tu* ‘exist’ and *me* ‘not exist’ (§13.1.2, §14.2.2). They are the
 27964 only verbs whose Sensory forms is not marked by a prefix.

27965 21.3.2.2 Direct perception

27966 The Sensory is used to express access to information (Tournadre & LaPolla 2014)
 27967 through any of the senses, most commonly vision, but also hearing (56), touch
 27968 (57), smell (58) and taste (59). It implies the discovery of a previously unknown
 27969 fact or confirmation of an uncertain fact.

- 27970 (56) *tu-mbri tce ui-skyt wuma zo pua-mpcyr*
 IPFV-cry LNK 3SG.POSS-voice really EMPH SENS-be.beautiful
 27971 ‘When it cries, its voice is very beautiful.’ (04-cuiniao-zh, 26)
- 27972 (57) *pú-wy-nymyle tce pua-mpu*.
 IPFV-INV-touch LNK SENS-be.soft
 27973 ‘It is soft to the touch.’ (19 khWlu, 25)
- 27974 (58) *tce nua tu-nymnym-nua tce, cymtsho ui-di, pua-pua-ŋyu*
 LNK DEM IPFV-smell-PL LNK musk 3SG.POSS-smell COND~PST.IPFV-be
 27975 *nŋ, ui-di pua-mnym, tce naŋna tcu ui-fsa*
 LNK 3SG.POSS-smell SENS-be.smell LNK DEM LOC 3SG.POSS-snare
 27976 *tu-ta-nua pua-ŋgryl*.
 IPFV-put-PL SENS-be.usually.the.case
 27977 ‘(The hunters) smell (the places where they find deer hair); if it is smell of
 27978 musk, it is very strong. And they put the snare there.’ (27-kikakCi, 68)
- 27979 (59) *tú-wy-ndza tce wuma zo pua-muum pua-ti*
 IPFV-INV-eat LNK really EMPH SENS-be.tasty SENS-say
 27980 ‘She said: ‘(These ferns, prepared this way) are very nice to eat.’’ (said just
 27981 after eating them; conversation 14.05.10)

27982 Although in the above examples there is no implication that the person pro-
 27983 ducing the sound or the objects mentioned in the sentences are not visible to
 27984 the speaker, in these contexts vision is largely irrelevant to determine the prop-
 27985 erty in question, and there is not ambiguity as to which sensory channel was
 27986 responsible for obtaining the information.

27987 21.3.2.3 Endopathic and extra-sensorial perception

27988 As in other languages of the area, but unlike Lhasa Tibetan (Tournadre & LaPolla
 27989 2014), the Sensory form is used for endopathic sensations (pain, itch, cold etc)
 27990 relating to the speaker, as in example (60).

- 27991 (60) *t^ham tce m^húj-c^ha-a, a-mi nui-m^hy^m.*
 now LNK NEG:SENS-can-1SG 1SG.POSS-foot SENS-hurt
 27992 ‘Now I can’t, my foot hurts.’ (21-kuGrummAG, 24)

27993 In (61), the Sensory is used in a generic sentence, when the speaker has ex-
 27994 perienced himself the feeling and recounts his experience while presenting it as
 27995 a generic fact (§14.6.1.4), and thus do not count as a real example of endopathic
 27996 Sensory with an experiencer other than the speaker.

- 27997 (61) *k^hu-maq^hu q^he tuu-cya nui-m^hy^m*
 SBJ:PCP-be.after LNK GENR.POSS-tooth SENS-hurt
 27998 ‘Afterwards teeths hurt.’ (27 tApGi, 66)

27999 In (62), which describes the effects of foot and mouth disease on cattle, the
 28000 speaker uses the Sensory to describe an inference about the endopathic feelings
 28001 of the cattle suffering from the disease (they are in pain), based on information
 28002 from vision and hearing (their whining and behaviour).

- 28003 (62) *nui-mci k^hy-rrwum maka m^húj-c^ha-nui tce nui-mci*
 3PL.POSS-saliva INF-collect at.all NEG:SENS-can-PL LNK 3PL.POSS-saliva
 28004 *tu-y^hru^hrwu^h zo nui-ny. tce nui-rqo nui-m^hy^m rca,*
 IPFV-flow.continuously EMPH SENS-be LNK 3PL.POSS-throat SENS-hurt SFP
 28005 ‘They cannot keep the saliva in their mouths, and it flows continuously.
 28006 Their throats hurt.’ (27-kharwut, 6)

28007 In (63) likewise we have the Sensory used with *m^hy^m* ‘hurt’ to describe an
 28008 event visually witnessed by the speaker.

- 28009 (63) *kuucnysqi t^hu-azyut ri, tce p^hjk^hu u-mi nui-m^hy^m tce ri,*
 seventy AOR-reach but LNK already 3SG.POSS-foot SENS-hurt LNK but
 28010 *nui kum^ha ts^hitsuku nui-ny^me cti.*
 DEM also house some.things SENS-work[III] be.AFF:FACT
 28011 ‘He is seventy, his foot hurts already, but even like that he does all sorts
 28012 of work at home.’ (14-siblings, 49-50)

28013 The Sensory is also possible in the case of extra-sensory perception obtained
 28014 by divination. In (64), it occurs on the verb *jnu-γ-rku* which refers to a present
 28015 situation (unknown to other people) and on *jnu-pʰγn* about a future event.

- 28016 (64) “*u-qɑ* *nutcu* *χsyr tui-tangor jnu-γ-rku* *tce, nuu*
 28017 3SG.POSS-root DEM:LOC gold one-basket SENS-PASS-be.put.in LNK DEM
a-ty-su-tcxt *tce jnu-pʰγn*” *jnu-ti*
 28018 IRR-PFV-CAUS-take.out LNK SENS-be.efficient SENS-say
 28019 ‘(After performing the divination, the lama) said ‘There is one basketful
 28020 of gold (buried) at the root (of the tree)_i, if it_i has someone take it out, it
 will solve (its_i problems).’ (2003 divination, 104)

28021 21.3.2.4 The expression of surprise

28022 Japhug has several interjections specifically used to express surprise (§10.2.1),
 28023 *amaj* and *mtsʰyri* ‘how strange’.

28024 The Sensory often occurs in such contexts, as in (65), as expected for a direct
 28025 visual perception (§21.3.2.2). This use of the Sensory evidential is what motivated
 28026 its analysis as a mirative marker in some languages (Hill 2012, DeLancey 2012,
 28027 Aikhenvald 2012).

- 28028 (65) *amaj,* *nuustuci jnu-mbro*
 28029 INTERJECTION:SURPRISE so.much SENS-be.high
 ‘It is so high!’ (150826 liyu tiao longmen-zh, 75)

28030 When the predicate is a stative verb, the degree nominal construction (§16.3.4,
 28031 §22.3), can alternatively be used to express the unexpected high degree of the
 28032 observed property.

- 28033 (66) *amaj,* *nuu u-tui-syre,* *mtsʰyri,*
 28034 INTERJECTION:SURPRISE DEM 3SG-NMLZ:DEG-be.funny how.strange
*u-tui-sy*_m*tsʰy* *nuu*
 28035 3SG-NMLZ:DEG-be.surprising SFP
 ‘It is so funny, so surprising!’ (150830 baihe jiemei-zh, 112)

28036 21.3.2.5 Other functions

28037 The Sensory is commonly used instead of the Factual for describing facts about
 28038 animals that do not live in Tibetan areas. Compare for instance the forms of the
 28039 stative verbs *sγymu* ‘be terrifying’ and *mpɛrr* ‘be beautiful’: they appear in the

28040 Factual when referring to spiders or flowers found in the area (67 and 68) and in
 28041 the Sensory when referring to lions and gnus, which the speaker has only seen
 28042 in zoos or in the television (69 and 70). The choice of the Sensory instead of the
 28043 Factual in such context might be a way for the speaker to highlight the fact that
 28044 this information comes from his/her own personal experience, because s/he may
 28045 not take for granted that everybody shares this knowledge.

28046 (67) *ŋgonŋpu NGOCna kꝫ-ti ci tu tce, nuuu wxti*
 disaster spider OBJ:PCP-say INDEF exist:FACT LNK DEM be.big:FACT
 28047 *nuu stꝫs jamar tu. kú-wy-rtoꝫ tce syy-mu.*
 DEM bean about exist:FACT IPFV-INV-look.at LNK PROP-be.afraid:FACT
 28048 ‘There is one that is called ‘disaster spider’, it is big, like the size of a bean.
 28049 It is terrifying to look at it.’ (26 mYaRmtsaR, 151)

28050 (68) *nuuu u-muuntoꝫ nuu mpcyr.*
 DEM 3SG.POSS-flower DEM be.beautiful:FACT
 28051 ‘Its flower is beautiful.’ (15-babW, 105)

28052 (69) *suŋgi nuu juu-syy-mu.*
 lion DEM SENS-PROP-be.afraid
 28053 ‘The lion is terrifying.’ (20 sWNgi, 64)

28054 (70) <*jiaoma> nuu juu-mpcyꝫ*
 gnu DEM SENS-be.beautiful
 28055 ‘The Gnu is beautiful.’ (20-RmbroN, 128)

28056 The Sensory is also common in all finite comparative constructions (§26.2),
 28057 whether the comparee is marked with the ergative (71) (§8.2.2.7) or the standard
 28058 takes the comparative postposition (72) (§8.2.7). The presence of the Sensory in
 28059 such constructions might be due to the fact that comparisons require an evalua-
 28060 tion of the respective positions of the standard and the comparee on a scale, and
 28061 that the result of this comparison is thus ‘freshly’ obtained information.

28062 (71) *slyzum kuu juu-dyn, tce tur-xpa tce bnuu-yjyn jamar*
 lunar.eclipse ERG SENS-be.many LNK one-year LOC two-times about
 28063 *yyzu, բmbyuuzum juu-rkun cti.*
 exist:SENS solar.eclipse SENS-be.few be.AFF:FACT
 28064 ‘Lunar eclipse are more numerous, they occur about twice a year, while
 28065 solar eclipse are rarer.’ (29-mWBZi, 169-170)

- 28066 (72) *tui-rna nua mbro yui svz pnu-wxti.*
 3SG.POSS-ear DEM horse GEN COMP SENS-be.big
 28067 ‘Its ears are bigger than those of the horse.’ (20-tArka, 5)

28068 The use of the Sensory is not obligatory in such constructions: the Factual is
 28069 also possible.

21.3.2.6 Sensory evidential and person

28071 With second person subjects, the Sensory is very commonly used to state a fact
 28072 about the addressee that the speaker noticed (not something he knew previously).
 28073 For instance, in contrast to (74) in the Factual in which the addressee’s (recent)
 28074 actions are irrelevant, a sentence such as (73) can be used if the speaker witnessed
 28075 something revealing the proficiency of the addressee.

- 28076 (73) *pnu-tui-mk^hyz*
 SENS-2-be.expert
 28077 ‘You are good at it.’ (heard in several conversations)

- 28078 (74) *nyzo stu zo tui-mk^hyz tce, tce nyzo c-tx-nyme*
 2SG most EMPH 2-be.expert:FACT LNK LNK 2SG TRAL-IMP-do[III]
 28079 ‘You are the best at it, do it!’ (150822 laoye zuoshi zongshi duide-zh, 37)

28080 With first person subjects, the Sensory is not rare. It is common with verbs
 28081 such as *rga* ‘be happy’ whose intransitive subject is the experiencer, as in (75)
 28082 (see §21.3.4 on the contrast between Sensory, Egophoric Present and Factual in
 28083 such contexts).

- 28084 (75) *ny-tciu ty-sci tce pnu-pe tce papa, azo*
 2SG.POSS-child AOR-born LNK SENS-good LNK good 1SG
 28085 *pnu-rga-a*
 SENS-be.happy-1SG
 28086 ‘It is nice that your son is born, I am happy.’ (conversation, 2013)

28087 With non-experiencer adjectival stative verbs, it can occur if the speaker dis-
 28088 covers something about oneself, for instance from the behaviour of others as in
 28089 (76).³

³This example is taken from the translation of Andersen’s story ‘The Ugly Duckling’, when a hunting dog appears before the eponymous character but does not bite him.

- 28090 (76) *azō ndyre nui-svjlob-a tce, tyrbavkci kumv zo*
 1SG on.the.other.hand SENS-be.ugly-1SG LNK hunting.dog also EMPH
 28091 *kú-wy-mtsuy-a míj-suisym*
 IPFV-INV-bite-1SG NEG:SENS-think[III]
 28092 ‘I am (so) ugly that even a hunting dog does not want to bite me.’ (140519
 28093 chou xiaoya-zh, 86)

28094 21.3.2.7 Tense and aspect

28095 The Sensory never has an inchoative meaning with stative verbs, unlike the Im-
 28096 perfective (§21.2.6). It can be used to describe both ongoing events or habitual/
 28097 generic situations (§21.3.2.5). With transitive verbs, it often occurs with the pro-
 28098 gressive (§21.3.2.1).

28099 The Sensory is mainly found in non-past contexts. However, unlike the Factual
 28100 and the Egophoric, the Sensory can refer to past events. In (77), the verb *nui-ti-nuu*
 28101 ‘they say/said’ concerns an event that had occurred decades before.

- 28102 (77) *azō a-p^he “nyzo ju-tuu-ce ra” nui-ti-nuu.*
 1SG 1SG.POSS-DAT 2SG IPFV-2-go be.needed:FACT SENS-say-PL
 28103 ‘They said to me: ‘You have to go.’ (2010-09, 104)

28104 The Sensory *nui-ti* of the verb *ti* ‘say’ is the normal way to report the words
 28105 uttered by a third person, when the speaker has heard them directly (as is ob-
 28106 viously the case in 77). The Aorist *ta-tut*, which is used to describe past events
 28107 directly witnessed by the speaker (§21.5.1.2), is never found in conversations to
 28108 quote someone else’s words (it occurs in temporal §21.5.1.4 and relative §21.5.1.6
 28109 clauses).

28110 The Sensory also occurs in future contexts in the apodosis of conditional clause
 28111 to express the prediction of a likely outcome, as in (78) (see also 64, §21.3.2.3).

- 28112 (78) *nui ty-ŋu tce tce, si lú-wy-yxjuu, smi a-ty-wxti tce*
 DEM AOR-be LNK LNK WOOD IPFV-INV-add fire IRR-PFV-be.big LNK
 28113 *nui-p^hyn*
 SENS-be.efficient
 28114 ‘(He thought:) ‘In this case, if (I) add more firewood, and if the fire is
 28115 bigger, it should work.’ (150827 taisui-zh, 63)

28116 The Sensory is also found to express events that one has not yet perceived, but
 28117 which one expects to be perceptible, as illustrated by the use of the verbs *yryz*
 28118 ‘exist’ and *w-jnú-ŋu* ‘isn’t it’ in (79).

- 28119 (79) *aki c-puu-syŋo ma [...] “ndzablan turme jo-yi*
 down.there TRAL-IMP:DOWN-listen LNK Jambudvípa man IFR-come
 28120 *tce, tuu-ci ky-kuu-nuuχtcyn uu-ŋguw*
 LNK INDEF.POSS-water AOR-SBJ:PCP-be.fierce 3SG.POSS-inside
 28121 *c-pjúu-wy-βde puu-ra” uu-kui-ti ci*
 TRAL-IPFV:DOWN-INV-throw SENS-be.needed 3SG.POSS-SBJ:PCP-say INDEF
 28122 *yvzu tce, uu-núr-ŋu kui?*
 exist:SENS LNK QU-SENS-be QU
 28123 ‘Go and listen down there to (see whether) there is someone saying ‘A
 28124 man from Jambudvípa has come, let us throw him into the fierce water.’
 28125 (28-smAnmi, 159)

21.3.3 Egophoric Present

21.3.3.1 Morphology

28128 The Egophoric Present is build combining the B type EASTWARDS *ku-* preverb
 28129 with stem I or stem III depending on person and transitivity (§12.2.2.2). Verbs
 28130 selecting EASTWARDS as their intrinsic orientation therefore have syncretism be-
 28131 tween Imperfective and Egophoric. For instance, the form *ku-ryzi-a* is in the Ego-
 28132 phoric Present in (80) and in the Imperfective in (81) (see §21.2.4 on this use of
 28133 the Imperfective).

- 28134 (80) *kuure ku-ryzi-a*
 DEM.PROX:LOC PRS-stay-1SG
 28135 ‘I am here.’ (heard in context)
- 28136 (81) *kutcu ku-ryzi-a puu-łob*
 DEM.PROX:LOC IPFV-stay-1SG SENS-be.needed
 28137 ‘I have to stay here.’ (28-qAjdoskAt, 78)

28138 Unlike the Sensory (§21.3.2.1), the Egophoric Present does not have a special
 28139 negative form, and selects the *muu-* negative prefix, as in (82).

- 28140 (82) *kuu-yrq^{hi} ky-ce muu-ku-c^ha-a*
 SBJ:PCP-be.far INF-go NEG-PRS-can-1SG
 28141 ‘I cannot go very far.’ (for now, due to an accident; conversation 17-09-21)

28142 The Egophoric Present form of the existential verbs *tu* ‘exist’ and *me* ‘not exist’
 28143 is regular: *ku-tu* and *ku-me* (83), respectively. The copulas *ju* ‘be’ and *mar* ‘not be’
 28144 lack an Egophoric Present form.

- 28145 (83) *azō kure a-ba* *ku-me* *tur-mgo*
 1SG here 1SG.POSS-free.time PRS-not.exist INDEF.POSS-food
 28146 *ku-osui-βzu-a* *cti*
 PRS-PROG-make-1SG be.AFF:FACT
 28147 ‘I don’t have time, I am making food.’ (Rkangrgyal, 47)

28148 Transitive verbs often combine the Egophoric Present with the Progressive
 28149 *asu-* (§21.6.1.1). The vowel of the preverb merges with that of the Progressive
 28150 prefix as *ku-osuu-* / *ku-oz-*, as in (84).

- 28151 (84) *ca uja* *zo ku-o<nu>sui-ndza-j* *ma fsapab*
 meat completely EMPH PRS-PROG<AUTO>-eat-1PL LNK animal
 28152 *w-tur-si* *w-gryl* *maje.*
 3SG.POSS-NMLZ:DEG-die 3SG.POSS-order not.exist:SENS
 28153 ‘(These days) we are eating only meat, as (domestic) animals have been
 28154 dying in great numbers (due to a disease).’ (2003 kandZislama, 132)

28155 21.3.3.2 Egophoric Present and first/second person indexation

28156 The Egophoric Present, while common in conversations, is nearly non-existent
 28157 in narrative and procedural texts (outside of quotations) unlike the Factual and
 28158 the Sensory.

28159 In declarative sentences, Egophoric Present can occur with first person subject,
 28160 whether intransitive subject as in *ku-nuna-j* ‘we are resting’ (85) or transitive
 28161 subjects as in *ku-taþ-a* ‘I am weaving it’ (86).

- 28162 (85) *kure ku-nuna-j*
 here EGOP-rest-1PL
 28163 ‘(Today, on the National Holiday), we are resting here.’ (conversation,
 28164 16-10-01)
- 28165 (86) *<kuabao> w-spa* *ci* *ku-taþ-a*
 satchel 3SG.POSS-material INDEF PRS-weave-1SG
 28166 ‘I am weaving a satchel.’ (conversation, 14-11-25)

28167 No example of Egophoric Present with second person subject in declarative
 28168 sentences has been found in the corpus, nor could such example be elicited. How-
 28169 ever, second person objects are possible, as in (87).

- 28170 (87) *kure ku-ta-nyjo*
DEM.PROX:LOC PRS-1→2-wait
28171 ‘I am right here waiting for you.’ (heard in context)

28172 As a result of the anticipation rule (§21.1.4), the person constraint on the Ego-
28173 phoric Present is reversed in interrogative sentences. As shown by (88) and (89),
28174 the Egophoric Present appears with second person subjects, and is not attested
28175 with first person. These two questions expect answers such as (93) and (80) (in
28176 §21.3.3.1) with first person and Egophoric.

- 28177 (88) *wu-kú-tui-scit-nui?*
QU-PRS-2-be.happy-PL
28178 ‘Are you (and your family) happy?’ (2002 qaCpa, 121)
- 28179 (89) *ŋotcu ku-tui-ryzi?*
where PRS-2-stay
28180 ‘Where are you?’ (heard in context)

28181 The person constraints described above are the reason for calling the TAME
28182 category discussed in this section “egophoric”, designating a type of evidentiality
28183 specifically marking ‘information as known through conscious personal involve-
28184 ment’ (Hill 2020).⁴

28185 21.3.3.3 Egophoric Present and third person

28186 The Egophoric Present can occur with third person subjects. This use is partic-
28187 ularly common in declarative sentences when the subject is a noun with a first
28188 person possessive prefix, whether an abstract inalienable noun as in the case of
28189 *a-wa* ‘my free time’ in (83), or kinship terms as in (90).

- 28190 (90) *a-wi cʰo a-wa ni nyzo ny-ndza*
1SG.POSS-grandmother COMIT 1SG.POSS-father DU 2SG 2SG.POSS-reason
28191 *kui wuma zo ku-nusumuzduy-ndzi tce*
ERG really EMPH PRS-worry-DU LNK
28192 ‘Grandmother and Father are very worried because of you.’ (150819
28193 haidenver-zh, 494)

28194 Conversely, Egophoric is also frequent with second person possessors in inter-
28195 rogative sentences, such as *ny-ma* ‘your work’ as in (91a).

⁴Hill argues in favour of replacing ‘egophoric’ with the term ‘personal evidential’.

- 28196 (91) a. *ny-ma* *wi-kú-dyn?*
 2SG.POSS-work QU-PRS-be.many
 'Do you have a lot of work?' (heard in context)
- 28197 b. *a-ma* *ku-dyn*
 1SG.POSS-work PRS-be.many
 'I have a lot of work.'

28200 With non-possessed subjects nouns, it also occurs when the first person is a
 28201 beneficiary, marked either as a possessor (92) or with oblique flagging as in the
 28202 clause *a-taꝝ wuma ku-sna* 'he is nice to me' in (93) above.

- 28203 (92) *χpxyltcin kuu a-ma* *ra ku-oz-nyma*
 ANTHR ERG 1SG.POSS-work PL PRS-PROG-do
 'Dpalcan is doing my housework (in my stead).' (conversation, 16-04-12)
- 28204
 28205 (93) *tc^heme nuu kuu 'wuma zo ku-scit-i, rjylpri a-taꝝ wuma*
 girl DEM ERG really EMPH PRS-be.happy-1PL king also 1SG-on really
 28206 *ku-sna, ㅂjob ra ri wuma zo ku-pe-nuu' to-ti*
 PRS-be.kind servant PL also really EMPH PRS-be.good IFR-say
 28207
 28208 'The girl said: 'We are very happy, the king is very kind to me, the
 servants are very nice.' (2002 qaCpa, 122-4)

28209 The use of Egophoric with third person subjects is an instance of what has been
 28210 termed 'broad egophoric' by (Gawne 2017: 89). Japhug appears to allow a wider
 28211 range of third person referents to occur with egophoric than most languages.
 28212 There are examples of Egophoric Present with third person subjects in which
 28213 the personal involvement of the speaker is not immediately obvious.

28214 In (94), we find Egophoric Present on the main verb, even though the transitive
 28215 subject and the speaker were not together at time of utterance.⁵

- 28216 (94) *alan nyki, ㅂdurjyt ri <shangban> ku-osuu-βzu*
 ANTHR FILLER TOPO LOC office.work PRS-PROG-do
 28217
 28218 'Alan, she is doing office work in Gdongbryad (these days).'
 (conversation, 2014-12-24)

28219 In (95), the use of the Egophoric Present is not straightforward.⁶

⁵There is however a relationship between them, since the subject of (94) is the daughter of the speaker.

⁶It is possible that the speaker selects this form because she describes a situation that directly concerns herself, since she is among the inhabitants of the district, who are not sick from the disease.

- 28220 (95) *kui-ngo wuma zo rkun, <abazhou> [...]*
 SBJ:PCP-be.sick really EMPH be.few:FACT Rngaba
 28221 *pui-nuu-muu-me cti q^he, p^hjk^hu*
 PST.IPFV-AUTO-EMPH~not.exist be.AFF:FACT LNK still
 28222 *ku-nuu-me.*
 PRS-AUTO-not.exist
 28223 ‘There are few people sick (of the Covid), (here) in Rngaba district there
 28224 never was anyone, and even now there is not (a single) one.’
 28225 (conversation 2020-07-31)

28226 Tshendzin explains the form *ku-nuu-me* ‘there is not’ here as (96) with the Fac-
 28227 tual Non-Past.

- 28228 (96) *t^ham kuy me’ ky-ti pui-ŋu.*
 now also not.exist:FACT INF-say SENS-be
 28229 ‘It means ‘not even now’.

28230 21.3.3.4 Tense and aspect

28231 The Egophoric Present expresses ongoing events or repeated actions occurring
 28232 during a short time range around the present time. Thus, the sentence (97) can
 28233 either mean ‘What are you doing *right now*?’ or ‘What are you doing *these days*?’.

- 28234 (97) *tc^hi ku-tuu-nyme?*
 what PRS-2-do[III]
 28235 ‘What are you doing (now, these days)?’ (heard in context)

28236 These two meanings are also possible when the Egophoric Present is combined
 28237 with the Progressive, as shown by (98) and (94).

- 28238 (98) *alan kui ji-pyri ku-osuu-βzu.*
 ANTHR ERG 1PL.POSS-dinner PRS-PROG-make
 28239 ‘Alan is preparing the dinner for us (right now).’ (conversation, 15-01-02)

28240 The Egophoric Present marks actions or states that are temporary. For in-
 28241 stance, *muu-ku-c^ha-a* ‘I cannot do it’ in (99) (and 82 in §21.3.3.1 above) means that
 28242 the speaker describes a non-permanent situation: she previously was able to do
 28243 it, and will presumably be soon able to do it again when she has fully recovered.

- 28244 (99) *pxjk^hu kumy uzo kuu ku-oz-nyma cti ma pxjk^hu*
 still also 3SG ERG PRS-PROG-do be.AFF:FACT LNK still
 28245 *mua-ku-c^ha-a wo.*
 NEG-PRS-can-1SG SFP
 28246 ‘Even now, he is still doing (the housework), as I am still unable (to do it,
 28247 due to an accident).’ (conversation, 17-09-01)

28248 The Factual (100) or the Sensory are used instead when describing situations
 28249 that have become permanent.

- 28250 (100) *tham a-pua-nyu, tu-ndze-a maka my-cha-a*
 now IRR-IPFV-be IPFV-eat[III]-1SG at.all NEG-can:FACT-1SG
 28251 ‘Now, I cannot eat (the fruit of the *Ribes stenocarpum*) at all (anymore,
 28252 because it is too sour, unlike when the speaker was a child and did not
 28253 mind about the sourness).’ (18-NGolo, 22)

28254 The Egophoric Present is restricted to present tense. In (101), the form *ku-ta-*
 28255 *nyjo* ‘I (will) be waiting for you’ referring to a future event is rather analyzable
 28256 as an Imperfective, given the syncretism between these two in the case of this
 28257 verb.

- 28258 (101) *a-jy-tui-yut tce, azo c^ho [...] ty^{cime} nuu kuu nuunu kyntc^has*
 IRR-PFV-2-bring LNK 1SG COMIT princess DEM ERG DEM town
 28259 *yuu uu-pci nuutcu ku-ta-nyjo.*
 GEN 3SG.POSS-outside DEM:LOC IPFV-1→2-wait
 28260 ‘When you bring (the bird), the princess and I will be waiting for you
 28261 outside of the town.’ (140507 jinniao-zh, 294)

28262 The Egophoric Present can also occur in the case of periods of time including
 28263 the present and the past. For instance, when asked whether she had seen a par-
 28264 ticular person, who was present at the time in Mbarkham, Tshendzin said the
 28265 sentence (102) with the Egophoric Present.

- 28266 (102) *mua-ku-otuy-a*
 NEG-PRS-meet-1SG
 28267 ‘I have not meeting him (these days).’ (conversation 16-03-10)

28268 21.3.4 Tripartite contrast

The tripartite contrast between Egophoric Present (103), Sensory (104, 105) and Factual (106) with the experiencer stative verbs such as *scit* ‘be happy’ in declarative sentences with a first person subject can help understanding the semantics of these TAME categories in this context.

- 28273 (103) *ku-scit-i*
 PRS-be.happy-1PL
 ‘We are happy.’ (conversation, in a response to a new years’ greeting)

28274 (104) *nuitcu juu-scit-a cti li tce tce a-zda*
 DEM:LOC SENS-be.happy-1SG be.AFF:FACT again LNK LNK 1SG-companion
 ri juu-pe-nuu,
 also SENS-be.good-PL
 ‘I am very happy there, the people with me are very nice.’ (140501 jingli,
 149)

28275 (105) *nuu tr-ηu tce, azo ndyre, bloybutchi syz*
 DEM AOR-be LNK 1SG on.the.other.hand elephant COMP
 ndyre juu-scit-a tce a-k^{hi} juu-ηgwi
 on.the.other.hand SENS-be.happy-1SG LNK 1SG.POSS-luck SENS-be.lucky
 ‘Since it is like that, I am happier than the elephant, I am luckier than
 him.’ (140425 shizi puluomixiusi he daxiang, 41)

28276 (106) *χsui-xpa jy-tsu-j, nuusthuuci zo scit-i,*
 three-year AOR-pass-1SG so.much EMPH be.happy:FACT-1PL
 amumi-j
 be.in.good.terms:FACT-1PL
 ‘We have been together for three years now, we are so happy together.’
 (Norbzang 2005, 95)

In (106), the speakers (humans stranded on an island) include the addressees (*rākshasī*s in human shape) in the first plural, and state their happiness together as an commonly agreed fact (the first step in a plan to cheat the *rākshasis*), hence the use of the Factual.

In (105), the selection of the Sensory here may be due to the presence of a comparative construction (§21.3.2.5). In (104) the choice of the Sensory rather than the Egophoric Present expresses that when thinking about it, the speaker feels that she is happy. The Egophoric Present in (103) entails the continuous conscience of being in a state of happiness, and that this state is temporary.

28296 **21.4 Modal categories**

28297 **21.4.1 Irrealis**

28298 **21.4.1.1 Morphology**

28299 The Irrealis has three exponents: a dedicated prefix *a-* in slot -6 (§11.2.1), a type
28300 A preverb in slot -3, and stem III in appropriate forms (§12.2.2.1, §21.1.2), as illus-
28301 trated by (107a). A cognate verb form with identical triple exponence is found in
28302 Tshobdun (Sun 2007b).

28303 With dynamic verbs, the preverb follows the lexically selected orientation of
28304 the verb (for instance *tr-* UPWARDS in 107a). Stative verbs take the DOWNWARDS
28305 *pui-* preverb like the Past Imperfective (§21.5.3.1) when used with a stative mean-
28306 ing, as in (107b), and the intrinsic orientation (WESTWARDS in 107c) when occur-
28307 ring with an inchoative meaning.

- 28308 (107) a. $a^{-6}-tr^{-3}-ndze$
IRR-PFV-eat[III]
28309 ‘Let it/him/her eat/ if s/he/it eats’
b. $a^{-6}-pui^{-3}-me$
IRR-IPFV-not.exist
28311 ‘If it does not exist’
c. $a^{-6}-nui^{-3}-me$
IRR-PFV-not.exist
28313 ‘If it disappears’

28314 Unlike the Imperative (§21.4.2.1), the Irrealis is compatible with all person con-
28315 figurations.

28316 **21.4.1.2 Main clauses**

28317 In main clauses, the Irrealis has four main functions. The first three (wish, jussive
28318 and uncertainty) are treated in this section, and the fourth one (delayed impera-
28319 tive) in §21.4.1.3.

28320 First, it can express a wish, often in combination with the predicative noun
28321 *smulym* ‘prayer’ (§21.8.3.2; see also in Tshobdun Sun 2007b: 804), as in (108), or
28322 with the sentence final particle *kua* (§10.4.2) as in (109).

- 28323 (108) *pja mundzamurχtəuy nur-skvt a-pur-tuu-tso smulym*
 bird all.kinds 3PL.POSS-speech IRR-IPFV-2-understand prayer
 28324 ‘May you understand the speech of all species of birds?’
 28325 (2003kandZislama, 85)

- 28326 (109) *turme ci a-nuu-spa-a kuu*
 human INDEF IRR-PFV-become-1SG SFP
 28327 ‘If only I could become a human!’ (150819 haidenver-zh, 242)

28328 While in (109) the wish is virtual, example (10) is a magical formula pronounced
 28329 by a lama, and the Irrealis has a performative function, conveying to the ad-
 28330 dressee the ability it describes.

28331 Second, the Irrealis can occur with third person referents with a jussive mean-
 28332 ing (see also Sun 2007b: 811 on Tshobdun), expressing either that the speaker
 28333 allows the subject to perform the action (110), a request or an order. Jussive Irre-
 28334 alis clauses can be used in a purposive complementation strategy (§21.4.1.6).

- 28335 (110) *a-t^huu-yi, a-t^huu-yi*
 IRR-PFV:DOWNSTREAM-come IRR-PFV:DOWNSTREAM-come
 28336 ‘Let him come, let him come (as he wishes.)’ (2003 Kunbzang, 41)

28337 In combination with the Autive (§19.1), the jussive Irrealis expresses that the
 28338 speaker does not care about the actions of the third person subject, as in (111)
 28339 (compare with the Autive Imperative, §21.4.2.3).

- 28340 (111) *wi-púu-wy-sat-a ny a-púu-wy-nur-sat-a ma my-p^hyo-tci*
 QU-SENS-INV-kill-1SG add IRR-PFV-INV-AUTO-kill-1SG LNK NEG-flee-1DU
 28341 ‘If she is to kill me let her kill me, we will not flee.’ (2002nyimavodzer,
 28342 36)

28343 With second persons, the Irrealis is found instead of the Imperative to express
 28344 non-controllable actions. In (112), compare for instance the non-controllable verb
 28345 *mna* ‘be better’ in the Irrealis with the controllable one *ryzi* ‘stay’ in the Impera-
 28346 tive.

- 28347 (112) *p^hyk^hu a-ty-tuu-mna, myzui ky-ryzi*
 still IRR-PFV-2-be.better yet IMP-stay
 28348 ‘(Wait till) you get better, stay a little more.’ (said to a convalescent
 28349 person who wants to leave the place where she is taken care of.’
 28350 (12-BzaNsa, 110)

28351 The negative Irrealis is also more felicitous than the Prohibitive (§21.4.3) with
 28352 non-controllable verbs, such as *nutç^homba* ‘have a cold’ in (113).

- 28353 (113) *a-my-tx-tuu-nutç^homba ra ma tce ny-cq^he*
 IRR-NEG-PFV-2-have.a.cold be.needed:FACT LNK LNK 2SG.POSS-cough
 28354 *jua-t^huu jua-ŋu wo*
 SENS-be.serious SENS-be SFP
 28355 ‘Don’t catch a cold, otherwise you cough will be become even more
 28356 serious.’ (conversation 17-09-01)

28357 Third, in interrogative clauses, the Irrealis can express the uncertainty of the
 28358 speaker on his/her ability to realize the action, as in (114).

- 28359 (114) *andi ki st^huci smar kui-wxti izo ky-sui-βzur tc^hi*
 west DEM.PROX so.much river SB_J:PCP-be.big 1PL INF-CAUS-move what
 28360 *a-tx-stu-j?*
 IRR-PFV-do.like-1PL
 28361 ‘How can we move such a huge river? (2005 tAwakWcqraR, 210)

28362 21.4.1.3 Delayed imperative

28363 The Irrealis can be used as a delayed or postponed imperative. This function in-
 28364 dicates, according to Sun’s (2007b: 809) apt description of the same phenomenon
 28365 in Tshobdun, ‘the speaker’s physical inaccessibility as an eyewitness, rather than
 28366 simply delayed compliance.’

28367 In (115), the verb in the Irrealis *a-tx-tu-ti* refers to an action to be realized at a
 28368 future moment expressed by the temporal clause in the Aorist *jy-tuu-azyut* ‘when
 28369 you arrive...’ (§21.5.1.4), when the speaker will not be present to remind the ad-
 28370 dressee to perform the action.

- 28371 (115) *[k^ha ky-mto jy-tuu-azyut] tce q^hihiji χsui-ŋka a-tx-tu-ti*
 house INF-see AOR-2-arrive LNK INTERJ three-word IRR-PFV-2-say
 28372 *ra*
 be.needed:FACT
 28373 ‘When you arrive at visible distance of the house, say *q^hihiji* three times.’
 28374 (qachGa 2012, 164-165)

28375 The contrast between the Irrealis and the Imperative to express delayed com-
 28376 mand can be illustrated by the following pair of examples from two version of
 28377 the same story, referring to the same action (the method to pass a dangerous

28378 place where a pair of magical boulders crush all people coming between them)
 28379 but from a different perspective.

28380 In (116), a nāga explains the method to the main character (Nyima 'Odzer). The
 28381 nāga is not coming with him; only Nyima 'Odzer and his horse intend to cross
 28382 the boulders. Therefore, the Irrealis verb forms *a-kx-tu-βraꝝ* and *a-ty-tu-zÿy-yÿ-*
 28383 *zo* are selected, as the nāga will not be present when Nyima 'Odzer will have to
 28384 realize these actions.

- 28385 (116) *nui-tu-armbat-ndzi tce, ny-mbro u-jme zuu*
 AOR:WEST-2-be.near-DU LNK 2SG.POSS-horse 3SG.POSS-tail EMPH
 28386 *p^hupi a-kx-tu-βraꝝ, nyzo ty-muj st^huci*
 potentilla.fruticosa IRR-PFV-2-attach 2SG INDEF.POSS-feather so.much
 28387 *a-ty-tu-zÿy-yÿ-zo, ny-mbro qale st^huci*
 IRR-PFV-2-REFL-CAUS-be.light 2SG.POSS-horse wind so.much
 28388 *a-nui-zÿy-yÿ-mbjom*
 IRR-PFV-REFL-CAUS-be.quick
 28389 'When you approach (the boulders), attach a branch of *Potentilla*
 28390 *fruticosa* on the tail of your horse, make yourself as light as a feather,
 28391 and may your horse be as quick as the wind.' (Smanmi2003.2, 60-61)

28392 By contrast, in (117), it is the horse Rtamchog Rinpoche who explains to Nyima
 28393 'Odzer how to cross the boulders. Since these two characters will do the crossing
 28394 together, the horse uses the Imperative *ty-zÿy-yÿ-zo* instead of the Irrealis
 28395 (§21.4.2.2).

- 28396 (117) *azō nuu, qale jamar zo tu-zÿy-yÿ-mbjom-a nyzo nui*
 1SG DEM wind about EMPH IPFV-REFL-CAUS-be.quick-1SG 2SG DEM
 28397 *ty-muj jamar ty-zÿy-yÿ-zo*
 INDEF.POSS-feather about IMP-REFL-CAUS-be.light
 28398 'I will make myself as quick as the wind, make yourself as light as a
 28399 feather.' (28-smAnmi, 117-119)

28400 In negative forms likewise, the Irrealis is better than the Prohibitive (§21.4.3.2)
 28401 if the addressee is to refrain from doing an action in the absence of the speaker
 28402 who issued the order/request/suggestion not to do it, as in (118), where both
 28403 assertive and negative Irrealis verbs in delayed imperative function are found.

- 28404 (118) [...] *ntsuar kyutupe ri maka u-jas a-ky-tuu-ndym*,
 always tell:FACT LNK completely 3SG.POSS-hand IRR-PFV-2-take[III]
 28405 *a-ky-tuu-sytcitsi zo a-ly-tuu-yut ma*
 IRR-PFV-2-continue EMPH IRR-PFV:UPSTREAM-2-bring LNK
 28406 *u-skyt a-my-ky-tuu-syŋym*
 3SG.POSS-word IRR-NEG-2-listen[III]
 28407 ‘She will not stop saying ‘...’, but don’t release your grasp on her hand,
 28408 and directly bring her (here), and don’t listen to her words.’ (qachGa
 28409 2003, 66)

28410 **21.4.1.4 Complement clauses**

28411 According to Sun’s (2007b: 807) description of Tshobdun, the Irrealis is required
 28412 when occurring with matrix verbs expressing desire or intention. In particular,
 28413 he points out that the verb *səsi?* means ‘think’ when the complement clause is in
 28414 realis mode, and ‘desire, want’ with a complement clause in the Irrealis.

28415 In Japhug, the cognate verb *suso* ‘think’ has the meaning ‘want’ rather with
 28416 Infinitive or Imperfective complement clauses (§24.5.4.1), such as (119).

- 28417 (119) *[nur wuma zo tu-ndze-a] nur-susam-a*
 DEM really EMPH IPFV-eat[III]-1SG SENS-think[III]-1SG
 28418 ‘I want to eat it a lot.’ (140506 woju guniang-zh, 35)

28419 Complement clauses in the Irrealis with *suso* ‘think’ as matrix verb are in all
 28420 cases reported speech, reflecting functions such hypothetical protasis and apo-
 28421 dosis (§21.4.1.5) in (120) or jussive (§21.4.1.2) as in (121) and (122).

- 28422 (120) *χawo zo kui-dur~dyn kui a-ky-nuutsʰyβ-nur tce*
 INTERJ EMPH SBJ:PCP-EMPH~ ERG IRR-PFV-attack.in.pack-PL LNK
 28423 *a-ty-tcʰu-nur tce, a-pu-sat-nur kui nur-susam-a ri*
 IRR-PFV-gore-PL LNK IRR-PFV-kill-PL SFP SENS-think[III]-1SG LNK
 28424 ‘I am thinking that if only they attacked in pack and gored (the lion),
 28425 they would probably kill it.’ (20-RmbroN, 65-67)
- 28426 (121) “*nunu tce kui-xtci~xtci ci tu-tcat-a tce nur*
 DEM LNK SBJ:PCP-EMPH~be.small INDEF IPFV-take.out-1SG LNK DEM
 28427 *a-ty-ndze” ny-susso*
 IRR-PFV-eat[III] IFR-think
 28428 ‘He thought: ‘I will take a few (olives from the jar) so that she (can) eat
 28429 some.’ (140516 yiguan ganlan-zh, 42)

28430 The used of reported speech with *suso* ‘think’ in (122) is a semi-grammaticalized
 28431 purposive construction (§21.4.1.6), where the Irrealis is not obligatory: similar
 28432 purposive clause with other TAME categories are also attested.

- 28433 (122) “*a-mi nunu a-tx-mna*” *nur-susam-a tce, nura*
 1SG.POSS-leg DEM IRR-PFV-be.better SENS-think[III]-1SG LNK DEM
 28434 *ku-z-nusman-a nyu.*
 PRS-CAUS-treat-1SG be:FACT
 28435 ‘In order for my leg to get better, I am treating it (with footbaths).’
 28436 (conversation 2013-11-12)

28437 The Irrealis in jussive function in a reported speech clause (‘I am thinking ‘may
 28438 my leg get better’) is semantically close to ‘want’ (‘I want my leg to get better’).
 28439 This may explain how the Irrealis became required with the Tshobdun matrix
 28440 verb *sasi?* in the meaning ‘want’.

28441 Like the Imperative (§21.4.2.4), the Irrealis occurs in subject complement clau-
 28442 ses with modal auxiliary verbs such as *ra* ‘be needed’, *nts^hi* ‘be better’ and *jyy* ‘be
 28443 possible’, with a jussive meaning as in (123) and (124), or a delayed imperative,
 28444 as in (115) above (§21.4.1.3).

- 28445 (123) *a-wuu c^ho a-bi ni*
 1SG.POSS-grandfather COMIT 1SG.POSS-younger.sibling DU
 28446 *c^hui-yi-ndzi ra ma zyni-sti ky-ryzi*
 IPFV:DOWNSTREAM-come-DU be.needed:FACT LNK 3DU-alone INF-stay
 28447 *my-c^ha-ndzi tce, [a-t^huu-yi-ndzi] ra*
 NEG-can:FACT-DU LNK IRR-PFV:DOWNSTREAM-come-DU be.needed:FACT
 28448 ‘My grandfather and younger brother have to come (with me), as they
 28449 cannot stay on their own, let them come.’ (2011-05-nyima 208-209)
- 28450 (124) *ki nur-sx-cke tce, [a-nuu-xfcu] nur-nts^hi*
 DEM.PROX SENS-PROP-burn LNK IRR-PFV-cool.down SENS-be.better
 28451 ‘This (tea) is too hot, let it cool down.’ (elicited)

21.4.1.5 Conditional clauses

28453 In the protasis, the Irrealis competes with initial reduplication (§12.4.1.2), Pro-
 28454 hibitive (§21.4.3.2) and Interrogative (§21.7.4.2). When the apodosis is in the Fac-
 28455 tual Non-Past, the Irrealis protasis expresses a condition whose probability of be-
 28456 ing realized may not be high, but which, if it is verified, almost certainly brings
 28457 the outcome expressed in the apodosis (at least in the speaker’s opinion), as in
 28458 (125).

- 28459 (125) *nua a-jy-ce tce tce^ha ky-zyut my-c^ha tce si*
 DEM IRR-PFV-go LNK soon INF-arrive NEG-can:FACT LNK die:FACT
 28460 *cti tce*
 be.AFF:FACT LNK
 28461 ‘Would he go there, he would not be able to reach (his goal), and would
 28462 die.’ (28-smAnmi, 60)

28463 The combination of a protasis in the Irrealis and an apodosis in the Past Imperfective is used to express counterfactual meaning (§21.5.3.4, §25.2.4), as in (126).

- 28465 (126) *tcizxy nua kuu-fse ci a-puu-tu ndyre, kura*
 1DU:GEN DEM SBJ:PCP-be.like INDEF IRR-IPFV-exist LNK DEM.PROX:PL
 28466 *kuu-fse mui-puu-nxηkunγke-tci wo*
 SBJ:PCP-be.like NEG-PST.IPFV-DISTR:walk-1DU SFP
 28467 ‘If we had (so many cattle and fields) like that, we would not be
 28468 wandering around like that.’ (2005 Kunbzang, 188)

28469 21.4.1.6 Purposive

28470 The Irrealis occurs in purposive complementation strategies. Two constructions
 28471 are attested. First, as in (127), the Irrealis clauses expresses the purpose of a action
 28472 referred to in another clause.

- 28473 (127) *k^hxtu csa-nxba^h-tci tce, [n^h-kyrme a-ty-zba^h]*
 rooftop TRAL-have.fun:FACT-1DU LNK 2SG.POSS-hair IRR-PFV-be.dry
 28474 ‘Let us go to the rooftop platform to rest, so that your hair can dry (after
 28475 bathing).’ (2002 qaCpa, 287)

28476 Second, with a similiative verb such as *fse* ‘be like’ or *stu* ‘do like’ and inter-
 28477 rogative pronoun as in (128), the Irrealis clause rather corresponds to the action
 28478 needed to realize the purpose, which is indicated by a coordinated clause *nua-p^hyn*
 28479 ‘(so that) it is efficient/it works/it solves it’.

- 28480 (128) *[nua tc^hi a-ty-fse] tce nua-p^hyn*
 DEM what IRR-PFV-be.like LNK SENS-be.efficient
 28481 ‘How (should he do) to solve (this problem)?’ (Divination 2005, 45)

28482 21.4.1.7 Periphrastic Irrealis

28483 The Periphrastic Irrealis combines the Irrealis copula *a-puu-ŋu* with one or a chain
 28484 of several verbs in the Imperfective, as in (129) (see also §21.2.2).

- 28485 (129) [u-*ngur* *pjur-kui-ce* *tce tu-ku* *ci*
 3SG.POSS-inside IPFV:DOWN-GENR:S/O-go LNK GENR.POSS-head a.little
 28486 *pjú-wy-nui-sycyt*, *pjú-wy-nui-χtci]* *a-pui-ŋu* *ndyre, wuma*
 IPFV-INV-AUTO-comb IPFV-INV-AUTO-wash IRR-IPFV-be LNK really
 28487 *zo* *sy-scit* *t^haŋ ny!*
 EMPH PROP-be.happy:FACT SFP SFP
 28488 ‘If one were to dive (in the water), comb and wash one’s hair, it would be
 28489 very nice!’ (140515 congming de wusui xiaohai-zh, 25-27)

28490 It replaces the Imperfective Irrealis (§21.4.1.1) in the case of telic verbs (see
 28491 §21.5.3.5).

21.4.2 Imperative

21.4.2.1 Morphology

28494 The Imperative is built by combining type A preverbs with stem I or stem III
 28495 depending on transitivity and number (§21.1.2). It only has second person subject
 28496 forms, which are however never marked with the second person *tu-* prefix, unlike
 28497 in other TAME categories (§14.2.1.2). In addition, transitive verbs can only take a
 28498 third person object; 2→1 configurations cannot be expressed with the Imperative,
 28499 and the Imperfective in hortative function is used instead (§21.2.5).

28500 The Imperative can occur with an overt second person pronoun referring to
 28501 the subject (see examples 135, §21.4.2.3 and 138, §21.4.2.4).

28502 Table 21.5 illustrates the Imperative paradigms of *ndza* ‘eat’, a transitive verb
 28503 with stem III alternation (§12.2.2), *amdzu* ‘sit’, an intransitive contracting verb
 28504 (§12.3), and *ce* ‘go’, a verb with stem II alternation (§12.2.1)

Table 21.5: Examples of Imperative paradigms

Person	<i>ndza</i> ‘eat’	<i>amdzu</i> ‘sit’	<i>ce</i> ‘go’
2SG(→3)	<i>tr-ndze</i>	<i>kr-ymdzui</i>	<i>jr-ce</i>
2DU(→3)	<i>tr-ndza-ndzi</i>	<i>kr-ymdzui-ndzi</i>	<i>jr-ce-ndzi</i>
2PL(→3)	<i>tr-ndza-mu</i>	<i>kr-ymdzui-nuu</i>	<i>jr-ce-nuu</i>

28505 For intransitive verbs which are neither contracting nor have stem II alterna-
 28506 tion, the Imperative forms are identical to the third person Aorist forms (§21.1.1.2).

28507 The Imperative lacks negative forms: the Prohibitive (§21.4.3) or negative Irre-
 28508 alis (§21.4.1.2) are used instead.

28509 21.4.2.2 Main clauses

28510 The Imperative expresses actions that the speaker wishes the addressee to realize.
 28511 It is appropriate for blunt orders (§130), requests (131), and also polite invitations
 28512 (§132).

28513 (130) *jy-ce!*

IMP-go

28514 ‘Go away!’ (many examples)

28515 (131) *tɔrde tce jy-lxt je ma a-<dianhua>*
 a.moment LNK IMP-release SFP LNK 1SG.POSS-phone

28516 *wi-kui-lxt yyzu*

3SG.POSS-SBJ:PCP-release exist:SENS

28517 ‘Call me in a moment, there is someone calling me on the phone!’
 28518 (conversation, 22-08-2018)

28519 (132) *<guazi> tɔ-ndza-ndzi*

melon.seed IMP-eat-DU

28520 ‘Eat some melon seeds!’ (conversation 14-05-10)

28521 The Imperative is not restricted to immediate commands/requests. In (133),
 28522 the actions referred to by the Imperative verbs *ly-ryci* ‘pull it’ and *tʰu-sytçyt* ‘add
 28523 firewood’ are to be realized (in the presence of the speaker) at two points of
 28524 reference in the future indicated by temporal clauses in the Aorist (§21.5.1.4).

28525 (133) “*a-wi smi tʰu-sytçyt*” *ty-tuit-a tce*
 1SG.POSS-grandmother fire IMP-add.firewood AOR-say[II]-1SG LNK
 28526 *ly-ryci, “a-wi smi ly-ryci”*
 IMP:UPSTREAM-pull 1SG.POSS-grandmother fire IMP:UPSTREAM-pull
 28527 *ty-tuit-a tce tʰu-sytçyt ra*
 AOR-say[II]-1SG LNK IMP-add.firewood be.needed:FACT
 28528 ‘When I say ‘grandmother, add firewood’, remove the firewood, and
 28529 when I say ‘grandmother, remove the firewood’, add firewood.’ (2005
 28530 Kunbzang, 370-371)

28531 As in Tshobdun (Sun 2007b: 809), the Irrealis is found instead of the Imperative
 28532 to express actions to be performed at a point in the future in the absence of the
 28533 speaker (§21.4.1.3).

28534 The Imperative does not commonly occurs for non-controllable verbs, especially
 28535 stative verbs. However, this constraint is more pragmatic than morphosyntactic,
 28536 and in some contexts, even a verb like *mbro* ‘be high’ can be used in the
 28537 Imperative, as in (134). In this type of example, the Imperative *tx-mbro* is identical
 28538 to the 3SG Aorist.⁷

- 28539 (134) *tce nūnūi cyr tce tu-mbri tce* “*со́в со́в со́в со́в со́в со́в со́в со́в*”
 28540 LNK DEM night LOC IPFV-sing LNK IDPH(X):cry IDPH(X):cry
tu-ti *ŋu* *tce, tui-sji tui-rtsyy tx-mbro, tui-sji tui-rtsyy*
 28541 IPFV-say be:FACT LNK one-day ONE-node IMP-be.high one-day ONE-node
tx-mbro” tu-ti *ŋu* *tu-ti-nuu* *ŋgryl.*
 28542 IMP-be.high IPFV-say be:FACT IPFV-say-PL be.usually.the.case:FACT
 28543 ‘(In june, when crops are about to grow), (the *tacočcos* bird)_i sings in the
 28544 night, making the sound *со́в со́в со́в со́в со́в со́в*, people say that it_i tells (the
 crops) ‘Grow by one node everyday!’’ (23-scuz, 113-114)

28545 21.4.2.3 Imperative and autive

28546 With the Autive prefix (§19.1), the Imperative has two distinct and nearly opposite
 28547 meanings.

28548 First, it can indicate a mild suggestion or a request for a favour (§19.1.3), as in
 28549 (135).

- 28550 (135) *laŋjuŋ nyzo tx-nui-ndym je tce, azo jyyst ci*
 28551 staff 2SG IMP-AUTO-take[III] SFP LNK 1SG toilet INDEF
lu-ce-a *ny*
 28552 IPFV:UPSTREAM-go-1SG SFP
 ‘Take the staff, I am going to the toilets.’ (2005 khu, 13)

28553 Second, it is also used in a mocking way to express defiance (§19.1.4), as in (136)
 28554 and (137).

- 28555 (136) *nui-nui-nyre ma nyzo qačpa ny-rzaβ ny-kui-mbi*
 28556 IMP-AUTO-laugh LNK 2SG frog 2SG.POSS-wife 2SG.POSS-SBJ:PCP-give
kui-tu *me*
 28557 SBJ:PCP-exist not.exist:FACT
 28558 ‘Laugh as you wish, nobody will give you a wife, you frog.’ (2002 qaCpa,
 176)

⁷In principle, the quotation in (134) could also mean ‘It grew by one node per day’, but Tshendzin is positive that an Imperative was meant here.

21 Tense, aspect, modality and evidentiality

- 28559 (137) *kynvβdi je a-wuu tujo, a-qe*
farewell SFP 1SG.POSS-grandfather demon 1SG.POSS-shit
28560 *kuu-sy-ckuu~cke ci ty-nui-ndze*
SBJ:PCP-PROP-EMPH~burn INDEF IMP-AUTO-eat[III]
28561 ‘Farewell, old demon, eat my hot shit!’ (2005 tWJo, 45)

21.4.2.4 Complement clauses

28563 The Imperative is commonly used in complement clauses of modal verbs. The
28564 combination the modal auxiliary *jyy* ‘be possible’ with an Imperative comple-
28565 ment clause expresses that the speaker politely allows the addressee to undertake
28566 an action that the addressee himself intends to do, as in (138) and (139).

- 28567 (138) *[nyzo ty-nui-ndym] jyy*
2SG IMP-AUTO-take[III] be.possible:FACT
28568 ‘Please take it.’ (divination, 84)
- 28569 (139) *ny-ky-t^hu ui-yyzu ny, [ty-t^he] jyy*
2SG.POSS-OBJ:PCP-ask QU-exist:SENS ADD IMP-ask[III] be.possible:FACT
28570 ‘If you have a question, please ask it.’ (conversation, 14-11-08)

28571 The modal verb *ra* ‘be needed’ with Imperative is used in requests (140) and
28572 also blunt orders with death treats(141).

- 28573 (140) *c-ty-t^he ra*
TRAL-IMP-ask[III] be.needed:FACT
28574 ‘Go and ask him about it.’ (divination, 8)
- 28575 (141) *c-ty-re ra ma cui-ky-ru*
TRAL-IMP-bring[III] be.needed:FACT LNK TRAL-INF-bring
28576 *mua~ny-pui-tui-c^ha ny ny ny-srym ny-srob*
COND~NEG-AOR-2-can be:FACT LNK 1SG.POSS-root 1SG.POSS-life
28577 *l^ht-i*
throw:FACT-1PL
28578 ‘Go and bring it here; if you do not succeed in going and bringing it
28579 here, we will destroy your root and your life.’ (Norbzang, 10)

21.4.2.5 Serial verb constructions

28581 Two verbs in the Imperative can be used in a Serial Verb Construction (§25.4.1),
28582 the first verb conveying the manner in which the action is performed, as in (142).

- 28583 (142) *tx-mbyom zo tx-ce ra*
 IMP-be.in.a.hurry EMPH IMP:UP-go be.needed:FACT
 28584 ‘Hurry up and go upstairs!’ (160706 poucet6, 6)

28585 The first verb can be in the prohibitive (§21.4.3), a construction meaning ‘do
 28586 *V₂* without doing *V₁*’ (143).

- 28587 (143) *kuki tṣu ki ma-nui-tuu-βde zo jx-ce*
 DEM.PROX path DEM.PROX NEG-IMP-2-throw EMPH IMP-go
 28588 ‘Go along this way without leaving it!’ (140507 jinniao-zh, 212)

28589 21.4.3 Prohibitive

28590 21.4.3.1 Morphology

28591 The Prohibitive is built by combining the dedicated negative prefix *ma-* (§13.1.1), a
 28592 type A preverb and the stem III of the verb when appropriate (§12.2.2.1, §21.1.2). In
 28593 second person subject forms, unlike the Imperative (§21.4.2.1), the second person
 28594 prefix obligatorily occurs, as in *ma-nu-tu-te* ‘don’t put him/her/it’ (144).

- 28595 (144) *nuitcu ma-nui-tuu-te ma tx-pytsa ra nui-sta*
 28596 DEM:LOC NEG-IMP-2-put[III] LNK INDEF.POSS-child PL 3PL.POSS-place
cti
 be.AFF:FACT
 28597 ‘Don’t put her there, it is the place of the children.’

28598 Unlike the Imperative (§21.4.2.1), the prohibitive has no constraints on person.
 28599 It can occur in 2→1 configurations (145), but also with a first person intransitive
 28600 (146) or transitive subject (147) and also in very rare cases in the third person
 28601 (148).

- 28602 (145) *ma-tx-kui-ndza-a tcet^ha ny-χpi pjuu-fcat-a*
 28603 NEG-IMP-2→1-eat-1SG later 2SG.POSS-story IPFV-tell-1SG
 ‘Don’t eat me, and I will tell you a story.’ (tWJo 2012, 62)

- 28604 (146) *za ma-tx-nuna-tci q^he*
 28605 soon NEG-IMP-rest-1DU LNK
 28606 ‘(In order to catch up with the wasted time), we will not stop (working)
 early (today).’ (conversation 14-05-10)

- 28607 (147) *nua k^hramba ma-ty-βze-a ra ma*
DEM lie NEG-IMP-make[III]-1SG be.needed:FACT SFP
28608 ‘I should not tell lies.’ (27-kikakCi, 222)
- 28609 (148) *tce tuu-mdzu uu-ta^b ma-nur-xtca^b ra ma*
LNK GENR.POSS-tongue 3SG.POSS-on NEG-IMP-stain be.needed:FACT LNK
28610 *tuu-mdzu tuu-syzonzon zo q^he c^huu-nuuymb^hβ*
GENR.POSS-tongue IPFV-make.numb EMPH LNK IPFV-swell
28611 *cti.*
be.AFF:FACT
28612 ‘(The *Arisaema consanguineum*) should not get on one’s tongue_i, as it
28613 makes the tongue_i numb, and it_i swells.’ (14-sWNgWJu, 145)

28614 The preverb is optional in second person prohibitive forms. For instance with
28615 *ti* ‘say’, *ma-tuu-ti* (NEG:IMP-2-say) and *ma-ty-tuu-ti* (NEG-IMP-2-say) both occur in
28616 free variation.

28617 Despite the clear morphological differences between the Prohibitive and the
28618 Imperative, the type A preverb is glossed as IMP and the negation as NEG (to
28619 avoid a redundant gloss PROHIB on both prefixes). When the preverb is elided,
28620 the negative *ma-* is glossed as NEG:IMP.

28621 21.4.3.2 Functions

28622 The Prohibitive with a second person subject is essentially the negative counter-
28623 part of the Imperative, with exactly the same range of functions (§21.4.2.2), in-
28624 cluding orders, requests and polite suggestions, such as the polite expression *ma-*
28625 *ty-tuu-rasle* (149), which corresponds to Chinese 不用客气 <búyòngkèqì> ‘you’re
28626 welcome’.

- 28627 (149) *ma-ty-tuu-rasle, ty-zyy-cui-fka je*
NEG-IMP-2-be.polite IMP-REFL-CAUS-be.full SFP
28628 ‘Please eat to your full!’ (heard in context)

28629 The prohibition can refer to an action to happen in the future, as in (150), where
28630 the moment when the action is to be avoided is indicated by the temporal clause
28631 in the Aorist (§21.5.1.4).

- 28632 (150) *tctetu ty-ari-tci tce, ur-tur-yxndzo*
 up.there AOR:UP-go[II]-1DU LNK 3SG.POSS-NMLZ:DEG-be.cold
 28633 *saxas zo ri, "utc^hutc^hui" ma-tu-ti*
 be.extremely:FACT EMPH LNK INTERJ NEG:IMP-2-say
 28634 'When we go up there (in the sky, near the moon), it will be extremely
 28635 cold, but then don't say 'brbr': (07-deluge-64)

28636 The negative Irrealis can also be used as a delayed prohibitive as in (151) (§21.4.1.3),
 28637 contrasting with the Prohibitive in the same way as the Irrealis in delayed im-
 28638 perative function contrasts with the Imperative (§21.4.2.2): the Prohibitive and
 28639 Imperative imply that the speaker will be present when the action is to be real-
 28640 ized or avoided (as in 150), while the Irrealis occurs when the speaker will not be
 28641 present.

- 28642 (151) *icq^ha ruidas^h ra kuu ta-tuit nuara, turme*
 the.mentioned animal PL ERG AOR:3→3'-say[II] DEM:PL people
 28643 *ui-cki a-my-ty-tuu-ti ma*
 3SG.POSS-DAT IRR-NEG-PFV-2-say LNK
 28644 'You will have to avoid telling human what the animal say.' (150902
 28645 hailibu-zh, 83)

28646 Like the Imperative (§21.4.2.4), the prohibitive also occurs in subject comple-
 28647 ment clauses with auxiliaries such as *ra* 'be needed' (147, §21.4.3.1).

28648 A construction with the same verb occurring in the Imperfective followed by
 28649 its Prohibitive form in the first person, with the alternative interrogative particle
 28650 *ci* (§10.4.2) in between, is used to express hesitation between two possibilities
 28651 (152).

- 28652 (152) *ku-ce-a ci ma-ky-ce-a kuu*
 IPFV:EAST-go-1SG SFP NEG-IMP-go-1SG SFP
 28653 '(I wonder) whether to go or not.' (elicited)

28654 The Prohibitive is also used in manner clauses meaning 'without doing *X*',
 28655 sharing their subject (and also possibly object) with another verb in the Impera-
 28656 tive or the Imperfective, as in (153) (see also 143, §21.4.2.5).

- 28657 (153) *sxtc^ha kuu-yrq^hi zuu pjú-wy-lxt ma-pú-wy-sat*
 place SBJ:PCP-be.far LOC IPFV:DOWN-INV-release NEG-IMP-INV-kill
 28658 *ra*
 be.needed:FACT
 28659 'One has to take it far away (from the house) without killing it.' (2010-11,
 28660 11)

28661 The Prohibitive is also found in the protasis of conditionals (§25.2), as in (154).
 28662 This type of ‘warning’ conditional construction expresses a possible undesirable
 28663 result occurring if the subject fails to perform the action designated by the verb
 28664 in the Prohibitive.

- 28665 (154) *tx-mt^htum kurny kx-kx-sqa nura zatsa*
 28666 INDEF.POSS-meat also AOR-OBJ:PCP-cook DEM:PL SOON
 28667 *ma-tý-wy-nuþdaþ q^he, ui-taþ ri kui-wyrum*
 28668 NEG-IMP-INV-take.care LNK 3SG.POSS-top LOC SBJ:PCP-be.white
 28669 *ku-te*
 28670 IPFV-put[III]
 28671 ‘In the case of meat also, if one fails to take care of cooked (meat) in
 28672 time, white stuff will appear on it.’ (20-sWrna,60)

28670 Finally, it can also be used in a counterfactual construction as in (155).

- 28671 (155) *nua svzny, nyzo kuu ma-tx-kur-sur-cqrab-a kuu*
 28672 DEM COMP 2SG ERG NEG-IMP-2→1-CAUS-be.intelligent-1SG ERG
 28673 *pjy-mna!*
 28674 PST.IFR-be.better
 28673 ‘It would have been better if you had not made me smart!’ (160711
 28674 riquet8-v2, 18)

21.4.4 Dubitative

28675 The Dubitative *ku-* is formally identical to the B type EASTWARDS preverbs, which
 28676 also marks the Imperfective and the Egophoric Present (§21.3.3). It always oc-
 28677 curs with the Autive *-nu-* prefix (§19.1 and with the polar question *ci* particule
 28678 (§10.4.2, see example 156), the interrogative *kuu* (§10.4.2, 158) or the alternative
 28679 polar question construction (combining a positive followed by the equivalent
 28680 negative verb form as in 157).

- 28682 (156) *tce lu-kx-nuu-ji nuu kuu zru tu-ti-nuu*
 28683 LNK IPFV-OBJ:PCP-AUTO-plant DEM ERG be.strong:FACT IPFV-say-PL
 28684 *jnu-ŋu tce my-xsi. ku-nnuu-zru ci kuma.*
 28685 SENS-be LNK NEG-GENR:know:FACT DUB-AUTO-be.strong QU SFP
 28684 ‘The cultivated (variety of Angelica) is better (than the wild one), they
 28685 say, I don’t know, maybe it is better.’ (17-ndZWnW, 34)

- 28686 (157) *ku-nuu-pʰyn* *mua-ku-nuu-pʰyn* *mx-xsi*
 DUB-AUTO-be.efficient NEG-DUB-AUTO-be.efficient NEG-GENR:know:FACT
 28687 *ma*
 SFP
 28688 'I don't know whether it efficient or not (as medicine).' (19-GzW, 108)

28689 In addition, dubitative verb forms are followed either by the sentence final
 28690 particles *kuma* or *kuye* (§10.4.2) as in (156) or a verb form such as *mx-xsi* 'one
 28691 does not know' (§ 157).

28692 The dubitative is mainly used to express doubts while reporting opinions from
 28693 other people (as in 156 and 157), but with the interrogative *kui* as in (158), its
 28694 meaning is rather that of emphasis on the fact that the speaker has no clue about
 28695 the answer to the question (as in French *dond...bien* in '*Qui donc cela peut-il bien*
 28696 *être?*').

- 28697 (158) *wo, nuu cuu ci ku-nuu-ŋu kui?*
 INTERJ DEM who INDEF DUB-AUTO-be QU
 28698 'Who on earth is it (who does all) that?' (2014-kWLAG, 619)

28699 21.5 Past categories

28700 The Aorist, Past Imperfective, Inferential Perfective and Inferential Imperfective
 28701 all strictly express past tense events or states when occurring in main clauses. In
 28702 addition, they all take the past transitive *-t* suffix (§21.1.3) in 1SG→3 and 2SG→3
 28703 forms of open stem verbs (see §21.5.1.1, §21.5.2.1 and §21.5.3.1).⁸

28704 This section describes the morphology of these TAME categories, their uses
 28705 in main clauses and subordinate clauses, and also the semantic contrast between
 28706 them in various contexts.

28707 21.5.1 Aorist

28708 21.5.1.1 Morphology

28709 The Aorist is built by combining stem II (§12.2.1, or stem I for non-alternating
 28710 verbs) with either A-type (159) or C-type preverbs (160) depending on person
 28711 configuration and transitivity (§15.1.1.1, §21.1.1.1): the latter are restricted to trans-
 28712 sitive direct 3→3' configurations (§14.3.2.2).

⁸The only non-past TAME category that is compatible with the *-t* suffix is the Apprehensive (§21.7.1).

- 28713 (159) *ty-ye-j*
 AOR:UP-come[II]-1PL
 28714 ‘We came (up).’ (many attestations)
- 28715 (160) *ta-tut*
 AOR:3→3'-say[II]
 28716 ‘S/he said it.’ (many attestations)

28717 In addition, like the Inferential, the Aorist takes the 1/2SG→3 Past transitive
 28718 suffix *-t* (§11.3, §21.1.3). Complete paradigms of transitive and intransitive verbs
 28719 in the Aorist are presented in §14.3.2, and need not be repeated here.

28720 Some Aorist verb forms are ambiguous and could be interpreted as belonging
 28721 to other TAME categories. The ambiguity with the Imperative (§21.4.2.1) is
 28722 discussed in detail in §21.1.1.2. A more difficult case is that between Past Imper-
 28723 fective *pui-* (§21.5.3) and the Aorist of stative verbs selecting DOWNWARDS as their
 28724 intrinsic orientation (§15.1.5). The only way of differentiating between the two
 28725 is the clear inchoative meaning of stative verbs in the Aorist (§21.5.1.3), showing
 28726 that *pui-rom* in (161) can only be analyzed as an Aorist ‘(when) it has dried’ rather
 28727 than as a Past Imperfective ‘it was dry’ (see also example §21.2.6, §33).

- 28728 (161) *ui-jwas rcanui pui-rom kumy ui-mdzu nuu*
 3SG.POSS-leaf UNEXP:FOC AOR-be.dry also 3SG.POSS-thorn DEM
 28729 *myzui zo mtcos*
 even.more EMPH be.sharp:FACT
 28730 ‘When its leaves have dried, the thorns (on the leaves) are even sharper.’
 28731 (18-NGolo, 70)

28732 21.5.1.2 Main clauses

28733 The Aorist occurs in main clauses to express past perfective events that the
 28734 speaker has witnessed him/herself. It is used to report actions that the speaker
 28735 has performed himself, as in (162) and (163), unlike the Inferential, which is only
 28736 compatible with first person in very specific contexts (§21.5.2).

- 28737 (162) *nuu kuu-fse rcanui <qibajin> zo*
 DEM SBJ:PCP-be.like UNEXP:FOC seven.or.eight.pounds EMPH
 28738 *ty-xtuu-t-a. tce <dong> pui-βzu-t-a*
 AOR-buy-PST:TR-1SG LNK freeze AOR-make-PST:TR-1SG
 28739 ‘(Nettles) like that, I bought seven or eight pounds. Then I put them in
 28740 the refrigerator.’ (conversation, 14-05-10)

28741 In the absence of any adverb with a function comparable to English ‘already’
 28742 in Japhug, the Aorist is used to express this meaning, in combination with a tense
 28743 adverb as in (163).⁹

- 28744 (163) *jufcundzì nr-cki tx-tuit-a ma, wuma zo*
 a.few.days.ago 2SG.POSS-DAT AOR-say[II]-1SG LNK really EMPH
 28745 *a-tsa zo pu-βze*
 1SG.POSS-adapted EMPH SENS-make[III]
 28746 ‘I already told you a few days ago, (the shoes you have sent me) fit me
 28747 really well.’ (conversation, 2019-05-26)

28748 Actions that the speaker has witnessed as a passive participant are also ex-
 28749 pressed with the Aorist rather than the Inferential.

- 28750 (164) *a-kui-rto& jx-ye tce yui-nú-wy-mbi-a*
 1SG.POSS-SBJ:PCP-look AOR-come[II] LNK CISL-AOR-INV-give-1SG
 28751 ‘He came to see me and gave it to me.’ (conversation, 17-09-21)

28752 In (165), the choice of the Aorist *ka-lyt* and the Past Imperfective *pu-wxti* re-
 28753 flects the fact that the speaker has directly seen the snowfall (rather than deduc-
 28754 ing its occurrence from the presence of snow on the ground). By contrast, the
 28755 Inferential *to-ndzì* ‘it melted’ (rather than the Aorist *tx-ndzì*) indicates that the
 28756 speaker has not witnessed the melting, and only deduced that it has occurred
 28757 due to the absence of snow, despite the snowfall in the previous night (§21.5.2.2).

- 28758 (165) *kutcu hanuni puu-yyndzo. juufcucyr txjpa*
 DEM.PROX:LOC a.little SENS-be.cold yesterday.night snow
 28759 *ka-lyt. ka-lyt ri mui-puu-wxti. jisŋi tce*
 AOR:3→3'-release AOR:3→3'-release LNK NEG-PST.IPFV-be.big today LNK
 28760 *lonba to-ndzì.*
 all IFR-ACAUS:melt
 28761 ‘Here it is a bit cold. Yesterday evening there was a snowfall. There was
 28762 snow but not much, and now it has melted completely.’ (conversation,
 28763 17-11-23)

28764 The Aorist is also used to describe the events that the speaker has seen on a
 28765 film, for instance the pear stories, as in (166).

⁹Tshendzin said (163) answering a question I had already asked a few days before.

- 28766 (166) *ty-pytso kui-y-nuu>yro tsuku yvzu-nuu*
 INDEF.POSS-child SBJ:PCP-<AUTO>play several exist:SENS-PL
 28767 *jy-ye-nuu tce, nura kui u-paxci ra ky-wum*
 AOR-come[II]-PL LNK DEM:PL ERG INF-collect AOR:3→3'-help-PL LNK
 28768 *ta-qur-nuu tce, ta-stuy-ndzur-nuu*
 AOR:3→3'-CAUS-stand-PL
 28769 ‘There were some children playing (there), they came, helped him to
 28770 collect the apples (that had been spilled) and helped (him) up.’
 28771 (chen-pear, 10-11)

28772 For events that have occurred in a more remote past, the requirement on di-
 28773 rect (visual) perception may be less strict. For instance, in (167), the verbs in
 28774 the Aorist express a series of events that have happened to a member of the
 28775 speaker’s extended family. They did not live in the same household, and did not
 28776 meet very frequently, and the speaker did not witness all of the events, but is
 28777 familiar enough with the situation to feel entitled to use the Aorist rather than
 28778 the Inferential.

- 28779 (167) *nui-mu nui tx-ngo q^he ci ci nui-si kui-fse ci*
 3PL.POSS-mother DEM AOR-be.ill LNK one one AOR-die SBJ:PCP-be.like one
 2880 *ci tx-mna kui-fse q^he kuaenui-xpa zo t^hui-mduu.*
 one AOR-be.better SBJ:PCP-be.like LNK seven-year EMPH AOR-live.up.to
 2881 ‘Their mother got ill, and survived seven years, sometimes looking like
 2882 she had died, sometimes looking like she was getting better.’ (14-siblings,
 2883 32-33)

28784 21.5.1.3 Change of state

28785 In main clauses, stative verbs (other than copulas, §22.5.1.1) in the Aorist always
 28786 express a change of state, whether adjectival verbs such as *dvn* ‘be many’ (168)
 28787 or existential verbs (169).

- 28788 (168) *nure kuma^h pcov <banqian> jy-kui-ye nura*
 DEM:LOC other side move AOR-SBJ:PCP-come[II] DEM:PL
 28789 *tu-nuu tce, tx-dvn-nuu.*
 exist:FACT-PL LNK AOR-be.many-PL
 28790 ‘(Now) there are people who have come from other places (to settle in
 28791 that village), (and the number of inhabitants) has increased.’ (140522
 28792 tshupa, 87)

- 28793 (169) *nvr-<dian>* *nur-me*
 2SG.POSS-electricity AOR-not.exist
 28794 ‘Your (cellphone) is out of battery.’ (you don’t have any electricity
 28795 anymore) (heard in context)

28796 The Aorist is however found on stative verbs in some temporal subordinate
 28797 clauses (§21.5.1.4) without change of state meaning.

28798 In addition to stative verbs, some modal verbs such as *c^ha* ‘can’ select the UP-
 28799 WARDS orientation with an inchoative meaning, as illustrated by example (17)
 28800 (§24.2.3.1) (see also §21.5.2.4).

28801 21.5.1.4 Temporal subordinate clauses

28802 The Aorist is used in subordinate clauses to mark a point of temporal reference.
 28803 It occurs in generic statements to indicate the period when an event takes place.
 28804 For instance in (170), the temporal clause *ftçar ky-ndzob* ‘when summer arrives’
 28805 must select the Aorist; no other TAME category would be possible here.

- 28806 (170) *wr-fsaq^he,* *[ftçar ky-ndzob]* *q^he li tu-łob.*
 3SG.POSS-next.year summer AOR-ACAUS:attach LNK again IPFV-come.out
 28807 ‘The next year, when summer arrives, it comes out again.’ (of a perennial
 28808 plant, 19-qachGa mWntoR, 29)

28809 Direct visual perception is irrelevant in temporal clauses. In (171), the Aorist
 28810 *jy-ye* occurs even though the speaker is only reporting a story about a parrot
 28811 that she has not witnessed personally, and only heard from someone else. Here
 28812 the meaning of the Aorist is simply to state the temporal condition when the
 28813 following actions (utterance of human speech) take place.

- 28814 (171) *turme jy-ye* *tce <laikerenle>* *tu-ti, tce <nihao>*
 person AOR-come[II] LNK a.guest.has.arrived IPFV-say LNK hello
 28815 *tu-ti.*
 IPFV-say
 28816 ‘(Of a parrot which is able to say a few words) When someone comes
 28817 (the parrot) says ‘A guest has arrived’, and says ‘hello’’ (24-qro, 112-113)

28818 With stative verbs, the Aorist can exceptionally used without inchoative mean-
 28819 ing (§21.5.1.3) in temporal clauses, but always with the UPWARDS *tr-* preverb. For
 28820 instance in (172), *tr-jpum* and *tr-xts^hum* mean ‘when it is thick’ and ‘when it is
 28821 thin’, not ‘when it becomes thick/thin’, which would be expressed with the in-
 28822 trinsic WESTWARDS preverbs (see also 140, §15.1.5.7 and 4, §21.1.3).

- 28823 (172) *tx-jpum tce tcendyre tuu-sŋi kʰro lú-wy-taʂ*
 AOR-be.thick LNK LNK one-day much IPFV-INV-weave
 28824 *pua-kui-cʰa ma tx-xtsʰum tce tce, koŋla*
 SENS-GENR:S/O-can LNK AOR-be.thin LNK LNK completely
 28825 *lú-wy-taʂ múaŋ-sy-cʰa*
 IPFV-INV-weave NEG:SENS-PROP-can
 28826 ‘When (the threads) are thick, one can weave a lot in one day, when they
 28827 are thin, it is not possible to weave.’ (2011-06-thaXtsa, 54-55)

28828 Apart from stative verbs, a similar use of the UPWARDS orientation is found
 28829 with the transitive verb *suso* ‘think’, ‘want’ in some contexts (§24.5.4.1).

28830 While the Aorist is restricted to past events in main clauses, it is found in tem-
 28831 poral clauses to express points of time reference in the future. In (173) and (174),
 28832 the Aorist forms *pua-tuu-nuu-ye-nuu* ‘when you come back’ and *pua-tuu-ari* ‘when you
 28833 go down’ refer to events that have not yet taken place at the time of utterance.
 28834 The use of the Aorist in future contexts is also observed in conditional clauses
 28835 (§21.5.1.5).

- 28836 (173) *nuzo pua-tuu-nuu-ye-nuu nūitcu cuparkʰyrkʰyt*
 2PL AOR:DOWN-2-VERT-come[II] DEM:LOC stone.step
 28837 *a-pua-tuu-łob-nuu tce azo tʰylwa puaŋpau*
 IRR-PFV:DOWN-2-come.out-PL LNK 1SG earth IDPH(II):soft
 28838 *pjaŋ-łob-a nyu*
 IPFV:DOWN-come.out-1SG be:FACT
 28839 ‘When you come back, take the stone steps, I will come down on the soft
 28840 earth.’ (2014-kWLAG, 438)

- 28841 (174) *tcetʰa pua-tuu-ari tce, ki a-ky-tuu-ctʰuŋ*
 soon AOR:DOWN-2-go[II] LNK DEM.PROX IRR-PFV:EAST-2-turn.towards
 28842 *tce, tcetʰa ju-nuu-če-nuu cti*
 LNK soon IPFV-VERT-go-1SG be.AFF:FACT
 28843 ‘When you go down there, turn (this magical object) in the direction (of
 28844 the râkshasas), and they will go back (from where they are from).’
 28845 (2011-04-smanmi, 121)

28846 In (175), both the temporal clause and the main clause contain a verb in the
 28847 Aorist, but in the latter, that verb *nu-me* ‘it disappeared’ is embedded in a com-
 28848 plement clause headed by the noun *u-ndža* ‘cause’ (§25.5.2, §24.6.3.5, with elided
 28849 possessive prefix), while the main verb *nyu* ‘be’ is in the Factual.

- 28850 (175) *a-βa tu ri, tce^ha nu-mbrxt tce tce*
 1SG.POSS-free.time exist:FACT LNK soon AOR-ACAU:break LNK LNK
 28851 *[a-<dian> nu-me] ndza ηu*
 1SG.POSS-electricity AOR-not.exist reason be:FACT
 28852 ‘I have time (to talk with you), but in a moment when (the phone line)
 28853 disconnects, it will be because my (cellphone) is out of battery.’
 28854 (conversation)

28855 The Aorist in subordinate clauses is not always used to fix a point of temporal
 28856 reference, however. It can also refer to an event preceding those of the following
 28857 clauses, and which the speaker has witnessed (as in main clauses, §21.5.1.2). In
 28858 (176), the clause *tx-mt^hum nú-wy-mbi-a* is not to be translated as ‘when (s/he/
 28859 someone) gave/gives meat’ (a translation that is possible in other contexts), but
 28860 rather as ‘(someone) had given me’ with as pluperfect, as a background event
 28861 that took place before the whole story begins.

- 28862 (176) *tx-mt^hum nú-wy-mbi-a tce, tu-ndze-a puu-ηu*
 28863 INDEF.POSS-meat AOR-INV-give-1SG LNK IPFV-eat[III]-1SG PST.IPFV-be
tce, k^hxtu ri puu-ryzi-a.
 28864 LNK roof LOC PST.IPFV-stay-1SG
 28865 ‘(Someone) had given me (a piece of) meat, and I was eating it, I was
 28866 staying on the roof platform (and then a kite flew down and robbed it).
 28866 (150909 qandZGi, 2)

28867 21.5.1.5 Conditional clauses

28868 In the protasis of reduplicated conditional (§12.4.1.2), the Aorist has a purely as-
 28869 pectual function, and does not express absolute past tense, but past tense relative
 28870 to the apodosis.

28871 The Aorist occurs in the protasis in generic contexts, as in (177).

- 28872 (177) *txci, qaj, stob staxpuu nura muu~my-t^hú-wy-yndzur ny*
 28873 barley wheat broad.bean peas DEM:PL COND~NEG-AOR-INV-grind ADD
ky-ndza my-k^hu
 28874 INF-eat NEG-be.possible:FACT
 28875 ‘If we don’t grind barley, wheat, broad beans and peas, they cannot be
 eaten.’ 06-BGa, 5)

28876 It is also found in conditional constructions referring to future events, as in
 28877 (178) and (179). This usage reminds of the use of the Aorist in future temporal
 28878 clauses (such as 173, §21.5.1.4).

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- 28879 (178) *tua~tv-tut-tut* *ny tce pjua-ta-sat nyu*
COND~AOR-2-say[II] add LNK IPFV-1→2-kill be:FACT
28880 ‘If you tell (anyone) about it, I will kill you.’ (150901 changfamei-zh, 54)
- 28881 (179) *pua~pua-njo* *ny, ndzizo bnuaz yuu ndzi-ku*
COND~AOR-be.defeated ADD 2DU two GEN 2DU.POSS-head
28882 *c^hú-wy-p^huit ra*
IPFV-INV-take.off be.needed:FACT
28883 ‘If he fails, we will decapitate both of you.’ (140505 liuhaohan zoubian
28884 tianxia-zh, 104-5)

28885 The Aorist is less felicitous in the protasis of counterfactuals (§25.2.4), where
28886 the Irrealis is used instead (§21.4.1.5).

21.5.1.6 Relative clauses

28888 The Aorist commonly occurs in finite relative clauses (§23.2.2), as in the object
28889 head-internal relative in (180).

- 28890 (180) *icq^ha* *[srullos-pua kua-fse na-k^ho]* *nunua*
the.aforementioned ring-DIM SBJ:PCP-be.like AOR:3→3-give DEM
28891 *ko-ct^huz*
IFR:EAST-turn.towards
28892 ‘He_i turned the little ring that (Smanmi Metog Koshana) had given him_i
28893 in the direction (of the râkshasas). (28-smAnmi, 173)

28894 The verb in the relative can also undergo totalitative reduplication of the first
28895 syllable (§12.4.1.5), as *tu~ta-stu* ‘all (the ways) in which she had done it’.¹⁰

- 28896 (181) *[ur-pi kua tu~ta-stu]* *nua to-stu q^he*
3SG.POSS-elder.sibling ERG TOTAL~AOR:3→3'-do.like DEM IFR-do.like LNK
28897

28898 ‘She did everything like her elder sister.’ (2014-kWLAG, 167)

28899 In relative clauses, the contrast between Aorist and Inferential is neutralized,
28900 as only the Aorist can appear. Thus, in both (180) and (181) above, the verb of the

¹⁰The object of the verb *stu* ‘do like’ refers to the manner in which the action is performed, not its patient (§14.4.2).

relative clause in the Aorist, while that of the main clause is in the Inferential. The events referred to in the Aorist in these relative clauses occur in the Inferential earlier in the stories: compare for instance the Inferential *jy-k^ho* in the main clause in (182) with the Aorist *na-k^ho* in the relative in (180).

- (182) *srunlob-puu kui-fse ci jy-k^ho.*
 ring-DIM SBJ:PCP-be.like INDEF IFR-give
 '(Smanmi Metog Koshana) gave him something like a little ring.'
 (28-smAnmi, 160)

21.5.1.7 Complement clauses

Some finite complement clauses take the Aorist when the main verb is also in the Aorist, as in (183).

- (183) *azo [nuu-z-nyre-t-a] puu-c^ha-a*
 1SG AOR-CAUS-laugh-PST:TR-1SG AOR-can-1SG
 'I succeeded in making her laugh.' (140430 jin e-zh, 179)

21.5.1.8 Periphrastic Narrative

Some speakers (in particular Kunbzang mtshu) use the Periphrastic Narrative instead of the Inferential as the main TAME category of narration when telling traditional stories.

The Periphrastic Narrative combines a verb in the Aorist with the copula in the Sensory *jnu-ŋu*. In (184), the periphrastic construction *t^hu-sta-nu jnu-ŋu* 'they woke up' corresponds to an Inferential *c^hy-sta-nu* in a similar story told by another speaker (185).

- (184) *nui բmaբ kui~kui-tu zo t^hu-sta-nu jnu-ŋu.*
 DEM soldier TOTAL~SBJ:PCP-exist EMPH AOR-wake-PL SENS-be
 'All the soldiers woke up.' (2003qachGa, 77)
- (185) *icq^ha kui-ruru բmaբmi nura c^hy-sta-nu.*
 the.aforementioned SBJ:PCP-guard soldiers DEM:PL IFR-wake-PL
 'The guards woke up.' (140507 jinniao-zh, 148)

As in the case of other periphrastic TAME constructions (see in particular 10, §21.2.2 concerning the Periphrastic Imperfective), a chain of several verbs in the Aorist can share one copula. In (186) for instance, the copula *jnu-ŋu* has scope over two clauses, each containing a verb in the Aorist (*ta-tut* and *mu-ta-tut-ndzi*, respectively).

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- 28930 (186) *tce [kur-wxti ni ndzi-p^he ta-tut] ri, [kur-wxti ni*
LNK SBJ:PCP-big DU 3DU.POSS-DAT AOR:3→3'-say[II] LNK SBJ:PCP-big DU
28931 *kua mui-ta-tut-ndzi] jnu-ŋu.*
ERG NEG-AOR:3→3'-say[II]-DU SENS-be
28932 ‘He told it_i to the two elder (sisters)_j, but they_j did not tell it_i (to their_j
28933 parents).’ (2005-stod-kunbzang, 35)

28934 In the case of the verb *ti* ‘say’, while the regular Periphrastic Narrative is at-
28935 tested (186), we also find a periphrastic form *ti jnu-ŋu* (187) with the Factual *ti*
28936 instead of the Aorist *ta-tut*.

- 28937 (187) “*a-pi jnu-срав-a” ti jnu-ŋu*
1SG.POSS-elder.sibling SENS-be.thirsty-1SG say:FACT SENS-be
28938 ‘She said: ‘Sister, I am thirsty.’ (2003 Kunbzang, 306)

28939 The verb *ti* ‘say’ in the Factual can share a copula with verbs in the Aorist in
28940 Periphrastic Narrative chains. In (188), the Factual form *ti* belongs to the same
28941 chain as the following Aorist form *ta-tut*, and *jnu-ŋu* has scope over both of them.
28942 This periphrastic construction is similar to that of (186) above, but with a verb in
28943 the Factual instead of the Aorist in the first clause.

- 28944 (188) *[stu kua-xtcı nua u-p^he ti] ny, [nua kua li*
most SBJ:PCP-be.small DEM 3SG.POSS-DAT say:FACT ADD DEM ERG again
28945 *ta-tut] jnu-ŋu*
AOR:3→3'-say[II] SENS-be
28946 ‘He told it_i to the youngest (sister)_j, and she_j told it_i (to her parents).’
28947 (2003 Kunbzang, 56)

28948 21.5.2 Inferential

28949 In this section, the term ‘Inferential’ is used as abbreviation for ‘Inferential Per-
28950 fective’, as opposed to the Inferential Imperfective discussed in §21.5.3.

28951 21.5.2.1 Morphology

28952 In the Kamnyu dialect of Japhug, the Inferential is built from the stem I of the
28953 verb with type D preverbs (§15.1.1.1, §21.1.1.1). For instance, the verb *ce* ‘go’ (whose
28954 stem II is *-ari*, §12.2.1), has the Inferential 3SG form *jo-ce* (IFR-say) ‘he said’ with
28955 the indefinite orientation type D preverb *jo-* and the stem I *-ce*.

28956 In the Xtokavian dialects of Japhug, there are only two series of preverbs (A
 28957 and B), and the Inferential is marked by combining the B type preverbs with the
 28958 Inferential prefix *a-*. The second person prefix *tu-* is inserted between the preverb
 28959 and the Inferential *a-* (compare 10a and 10b, §15.1.1.3).

28960 Transitive verbs with open syllable stem with first and second person singular
 28961 subjects and third person object in addition select the *-t* past tense suffix (§11.3,
 28962 §21.1.3, -z in some dialects of Japhug), as illustrated by (189), (192) and (190) (see
 28963 also 203, §21.5.2.3).

- 28964 (189) *azō cʰa kʰro ko-tsʰi-t-a*
 1SG alcohol much IFR-drink-PST:TR-1SG
 28965 ‘I drank a lot of alcohol.’ (aesop zuoke de gou-zh, 36)

- 28966 (190) *maka nr-βzaylyn βze-a ra ma*
 completely 2SG.POSS-payback make[III]:FACT-1SG be.needed:FACT LNK
 28967 *a-tciu u-srob ko-tuu-ri-t tce*
 1SG.POSS-son 3SG.POSS-life IFR-2-save-PST:TR LNK
 28968 ‘I have to return the favour, as you have saved my son’s life.’
 28969 (2011-04-smanmi, 49)

28970 The verb *ti* ‘say’ is irregular in lacking this suffix in the Inferential; the 1SG and
 28971 2SG Inferential of this verb are thus *to-ti-a* and *to-tuu-ti* as in (191), not †*to-ti-t-a* and
 28972 †*to-tuu-ti-t*.

- 28973 (191) *tce nuu u-qʰu tce tcʰi to-ti-a?*
 LNK DEM 3SG.POSS-after LNK what IFR-say-1SG
 28974 ‘What did I say after that?’ (140522 Kamnyu zgo, 221)

28975 The Inferential occurs with the negative prefix *mu-* (§13.1.1), as in (192).

- 28976 (192) *mu-to-ta-t-a*
 NEG-IFR-put-PST:TR-1SG
 28977 ‘I did not put (the tea on the oven).’ (Conversation, 28-04-2018, Dpalcan)

28978 In the Kamnyu dialect, the preverbs are prevented from merging with the initial
 28979 *a-* of contracting verbs (§12.3) by insertion of the peg circumfix (§11.4), to
 28980 avoid confusion with the Imperfective (since the result of the vowel merger of B
 28981 type and D type preverbs with *a-* is identical). This insertion occurs in third (193)
 28982 and first person (see 205, §21.5.2.3) forms.

- 28983 (193) *konyla turme jy-k- $\gamma\beta$ zu-nuu-ci*
 really person IFR-PEG-become-PL-PEG
 28984 ‘(The puppets) became real people.’ (150822 yan muouxi de ren-zh, 46)

28985 In the second person, the prefix *tuu-* occurs in slot -2 (§11.2.1, like the prefical
 28986 element *k(u)-* of the peg circumfix.) between the preverbs and the verb stem,

- 28987 (194) *nyzo pya jy-tuu- $\gamma\beta$ zu cti tce*
 2SG bird IFR-2-become be.AFF:FACT LNK
 28988 ‘You have become (transformed into) a bird.’ (160630 abao-zh, 151)

28989 Table 21.6 presents the paradigms of a regular transitive verb (*ts^{hi}* ‘drink’), the
 28990 irregular *ti* ‘say’ (both with a 3SG object) and an intransitive contracting verb
 28991 (*a β zu* ‘become’) in the Kamnyu dialect.

Table 21.6: Inferential paradigms

Subject	<i>ts^{hi}</i> ‘drink’	<i>ti</i> ‘say’	<i>aβzu</i> ‘become’
1SG($\rightarrow 3'$)	<i>ko-ts^{hi}-t-a</i>	<i>to-ti-a</i>	<i>jy-$\textcolor{red}{k}$-$\gamma\beta$zu-a-$\textcolor{red}{ci}$</i>
1DU($\rightarrow 3'$)	<i>ko-ts^{hi}-t$\dot{c}i$</i>	<i>to-ti-t$\dot{c}i$</i>	<i>jy-$\textcolor{red}{k}$-$\gamma\beta$zu-t$\dot{c}i$-$\textcolor{red}{ci}$</i>
1PL($\rightarrow 3'$)	<i>ko-ts^{hi}-j</i>	<i>to-ti-j</i>	<i>jy-$\textcolor{red}{k}$-$\gamma\beta$zu-j-$\textcolor{red}{ci}$</i>
2SG($\rightarrow 3'$)	<i>ko-tuu-ts^{hi}-$\textcolor{red}{t}$</i>	<i>to-tuu-ti</i>	<i>jy-tuu-$\gamma\beta$zu</i>
2DU($\rightarrow 3'$)	<i>ko-tuu-ts^{hi}-nd$\dot{z}i$</i>	<i>to-tuu-ti-nd$\dot{z}i$</i>	<i>jy-tuu-$\gamma\beta$zu-nd$\dot{z}i$</i>
2PL($\rightarrow 3'$)	<i>ko-tuu-ts^{hi}-nuu</i>	<i>to-tuu-ti-nuu</i>	<i>jy-tuu-$\gamma\beta$zu-nuu</i>
3SG($\rightarrow 3'$)	<i>ko-ts^{hi}</i>	<i>to-ti</i>	<i>jy-$\textcolor{red}{k}$-$\gamma\beta$zu-$\textcolor{red}{ci}$</i>
3DU($\rightarrow 3'$)	<i>ko-ts^{hi}-nd$\dot{z}i$</i>	<i>to-ti-nd$\dot{z}i$</i>	<i>jy-$\textcolor{red}{k}$-$\gamma\beta$zu-nd$\dot{z}i$-$\textcolor{red}{ci}$</i>
3PL($\rightarrow 3'$)	<i>ko-ts^{hi}-nuu</i>	<i>to-ti-nuu</i>	<i>jy-$\textcolor{red}{k}$-$\gamma\beta$zu-nuu-$\textcolor{red}{ci}$</i>

28992 The contrast between upper A-type (*tr-*, *lr-*, *kr-*, *jy-*) and D-type preverbs (*to-*,
 28993 *lo-*, *ko-*, *jo-*) is neutralized when followed by the inverse prefix (see Table 15.2,
 28994 §15.1.1.1), so that transitive verbs without stem II alternation selecting the upper
 28995 orientations have syncretism between Aorist and Inferential. For instance, the
 28996 phonetic form [kóyndo] is ambiguous between the Aorist 3' \rightarrow 3 *ký-wy-ndo* (AOR-
 28997 INV-take) and the Inferential 3' \rightarrow 3 *kó-wy-ndo* (AOR-INV-take), both translatable
 28998 as ‘someone/it/s/he grabbed him/her’.

28999 21.5.2.2 Evidentiality

29000 In main clauses, the Inferential is used to express past perfective event, like the
 29001 Aorist (§21.5.1.2). The contrast between these two categories is of an evidential
 29002 nature: the Aorist is selected if the speaker had directly witnessed the event,
 29003 while the Inferential occurs when only indirect clues allow him/her to deduce
 29004 that the action has taken place.

29005 For instance, (195a) in the Aorist can be uttered if the speaker has seen the
 29006 snowfall, while (195b) in the Inferential is chosen if the speaker infers that a
 29007 snowfall has taken place from the presence of snow on the ground.

- 29008 (195) a. *txjpa ka-lyt*
 snow AOR:3→3-release

- 29009 b. *txjpa ko-lyt*
 snow IFR-release

29010 ‘It snowed.’ (elicited, see 165 above)

29011 In the case of predicates involving a change of state, selecting the Aorist is
 29012 only possible if the speaker has witnessed the whole process. For instance, to
 29013 express the meaning ‘the water boiled’, the Aorist in (196a) is possible only if
 29014 the speaker has observed the change of phase of water to ebullition, while the
 29015 Inferential form (196b) is used when the s/he notices that the water has already
 29016 started boiling.

- 29017 (196) a. *tur-ci tx-ala*
 INDEF.POSS-water AOR-boil
- 29018 b. *tur-ci to-k-yla-ci*
 INDEF.POSS-water IFR-PEG-boil-PEG

29019 ‘The water boiled.’ (elicited)

29020 In narratives concerning the speaker, the Aorist is used in the case of actions
 29021 that s/he has directly seen, while the Inferential is chosen for events that s/he has
 29022 not directly perceived. For instance, in (197), the speaker selects the Inferential
 29023 *pjr-yi* to describe the coming of the falcon, as she had not noticed the presence
 29024 of that bird until the piece of meat in her hand was snatched away. Selecting the
 29025 Aorist *puu-ye* (AOR:DOWN-come[II]) ‘it came down’ instead would mean that the
 29026 speaker had seen the falcon approaching. The Aorist *ta-nuu-mja* ‘it took it away’
 29027 expresses that the speaker felt and saw the meat being taken away; choosing
 29028 Inferential *to-nuu-mja* instead would have implied that the speaker had not even

noticed the snatching event, and had only realized the disappearance of the meat after it had been taken away.

- (197) *k^hxtu ri pu-ryzi-a tce tx-mt^hum tu-ndze-a*
 terrace LOC PST.IPFV-stay-1SG LNK INDEF.POSS-meat IPFV-eat[III]-1SG
pu-ŋu ri, toðde tcendyre qandzyi pjy-yi tce, nura
 PST.IPFV-be LNK suddenly LNK falcon IFR:DOWN-come LNK DEM:PL
mui-puu-tso-a tce, ndyre a-jab tx-mt^hum nuunu
 NEG-AOR-understand-1SG LNK LNK 1SG.POSS-hand INDEF-meat DEM
ta-nuu-mja tce
 AOR:3→3':UP-AUTO-take LNK
 ‘I was on the terrace eating meat, and suddenly a falcon came down without me noticing, and took away the (piece of) meat in my hand.’
 (150909 qandZGi, 5-7)

In retellings of narratives observed on film, such as the *Pear stories*, the Aorist is used for most events that have appeared in the video (§21.5.1.2). The Inferential is used when only the result of action is visible. For instance in (198), the Inferential *to-suu-mts^hyt* instead of the Aorist *ta-suu-mts^hyt* occurs because the filling process is already completed in the beginning of the *pear story* video.

- (198) *tcendyre ʂnuu-kuxtco to-suu-mts^hyt tce*
 LNK two-basket IFR-CAUS-be.full LNK
 ‘(The man) had filled two baskets (with the pears).’ (chen-pear, 2)

The Inferential can also be used in a more subtle way: to express that one of the characters in the film has not witnessed an event, even though the narrative may have seen it. For instance, the stealing of the pears is described using the Aorist *ja-nuu-tsum* ‘he took them away’ in (199) since it is visible on the video, but when describing the point of view of the old man discovering that the pears have disappeared when climbing down his ladder, the Inferential *jo-nuu-tsum* ‘he took them away’ occurs instead.

- (199) *nuunu kuu u-paxci tui-kuxtco nuu ja-nuu-tsum*
 DEM ERG 3SG.POSS-apples one-basket DEM AOR:3→3'-AUTO-take.away
 ‘(The boy) took away one basketful of pears.’ (chen-pear, 5)

- 29054 (200) *rgytpu nuu puu-tob ri, tce pjy-suixsyl ri*
 old.man DEM AOR:DOWN-come.out LNK LNK IFR-realize LNK
 29055 *jo-nuu-tsum cti tce u-wypa maje,*
 IFR-AUTO-take.away be.AFF:FACT LNK 3SG.POSS-method not.exist:SENS
 29056 ‘When the old man came down from the tree, he realized that (the pears)
 29057 had been taken away, but could not do anything about it.’ (chen-pear, 14)

29058 The Inferential can occur to express events seen in dreams, as in (201).

- 29059 (201) *[azo [...] qarts^{hi} ny-k-wpa-a-ci] puu-yymjmo-t-a*
 1SG cricket IFR-PEG-become-1SG-PEG AOR-dream-PST:TR-1SG
 29060 ‘I dreamed that I had become a cricket.’ (150904 cuzhi-zh, 193)

29061 The Inferential is the main TAME category to describe actions occurring in tra-
 29062 ditional stories, though some speakers rather prefer the Periphrastic Narrative
 29063 construction (§21.5.1.8). Example (202) illustrates this narrative function, where
 29064 the succession of the verbs in the Inferential reflects the relative temporal order
 29065 of the actions. The choice of the Inferential rather than the Aorist here is moti-
 29066 vated by the fact that the fictional events described in these stories have not been
 29067 witnessed by the speaker.

- 29068 (202) *ta-^{bi} nuu kuu nuunja ui-ndzji nuunu*
 INDEF.POSS-younger.sibling DEM ERG COW 3SG.POSS-skin DEM
 29069 *c^hy-r^{yy}dut q^hendyre c^hy-tsuif. tcendyre nyki, ta-mar*
 IFR-peel.skin LNK IFR-sew LNK FILLER INDEF.POSS-butter
 29070 *tui-tuyja^b nuu to-ndo qhe, ui-^{nguu} nuutcu*
 one-NMLZ:ACTION-churn DEM IFR-take LNK 3SG.POSS-inside DEM.LOC
 29071 *ko-zyy-mp^hur.*
 IFR-REFL-wrap
 29072 ‘The younger brother skinned the hide of the cow and sewed it. He took
 29073 one churnfull of butter, and wrapped himself inside (the hide).’
 29074 (07-deluge, 14-15)

29075 The Inferential Imperfective occurs for imperfective events and states in nar-
 29076 ratives (§21.5.3.2).

29077 In narratives told in the Inferential, the Aorist is restricted to temporal (§21.5.1.4)
 29078 and relative (§21.5.1.6) subordinate clauses.

29079 21.5.2.3 Inferential with first person

29080 The Inferential is not rare with first person subjects in assertive clauses, but has
 29081 specific meanings. With volitional verbs, this combination can be uttered when
 29082 a speaker notices that s/he forgot to do or did not properly do an action. For
 29083 instance, in (203), the speaker (Tshendzin) selects the Inferential when realizing
 29084 that she forgot to put the water to boil (see 192, §21.5.2.1 for a similar example).

- 29085 (203) *tur-ci mu-to-sui-yl-a-t-a*
 INDEF.POSS-water NEG-IFR-CAUS-be.boiling-PST:TR-1SG
 29086 ‘I did not put the water to boil.’ (Conversation, 01-05-2018, Tshendzin)

29087 The Inferential with first person is also found when the speaker realizes a fact
 29088 that s/he had failed to notice or not fully understood before.

29089 For instance, in (204), Inferential 1SG *jyr-k-ytuy-a-ci* ‘I have met’ occurs in a
 29090 sentence uttered when the speaker has ascertained that the person he has met is
 29091 a Daoist master, after a long conversation.

- 29092 (204) *a-k^{hi} ma kuiki kojla nuu jyr-k-ytuy-a-ci*
 1SG.POSS-luck LNK DEM.PROX real DEM IFR-PEG-meet-1SG-PEG
 29093 ‘I am lucky, I (finally) met a real (Daoist master).’ (150907
 29094 laoshandaoshi-zh, 37)

29095 Similarly, in (205), the speaker (a horse) uses the Inferential *jyr-k-yβzu-a-ci* ‘I
 29096 have become’ (as opposed to the Aorist *nuu-aβzu-a*) to express his sudden realiza-
 29097 tion that it has been tricked into becoming a domestic animal.

- 29098 (205) *turme yuu uu-bjɔb jyr-k-yβzu-a-ci*
 man GEN 3SG.POSS-servant IFR-PEG-become-1SG-PEG
 29099 ‘I have become a slave of the man.’ (aesop ma he lu-zh, 29)

29100 Example (206) illustrates the contrast between Aorist and Inferential with first
 29101 person subjects: the speaker did put the water on the oven, but forgot to open
 29102 the oven, hence the use of the Inferential for the second verb.

- 29103 (206) *tur-ci ky-ta-t-a ri, <dian> mu-to-zwar-a*
 INDEF.POSS-water AOR-put-PST:TR-1SG LNK electricity NEG-IFR-burn-1SG
 29104 ‘I put the water (on the oven), but did not open the electricity.’
 29105 (Conversation, 04-05-2018, Tshendzin)

29106 The Inferential with first person can also be used when the speaker did the
 29107 action he intended but on the wrong object, as in (207), a sentence said after
 29108 Tshendzin realized (by looking into the pot) that she mistakenly warmed the
 29109 wrong pot (not the one containing nettles). Here *mts^halu* ‘nettle’ is focalized using
 29110 the copula *jnu-mas* (§22.5.3.2).

- 29111 (207) *mts^halu ko-yx-ndzam-a jnu-mas*
 nettle IFR-CAUS-be.warm-1SG SENS-not.be
 29112 ‘It is not the nettles that I warmed.’ (Conversation, 07-05-2018,
 29113 Tshendzin)

29114 The Inferential with first person is particularly common with verbs expressing
 29115 uncontrollable and non-volitional actions, such as (208).

- 29116 (208) *kx-nuzuβ ko-rdal-a*
 INF-sleep IFR-overshoot-1SG
 29117 ‘I overslept.’ (elicitation)

29118 The inferential does not however express by itself non-volitionality; the autive
 29119 prefix *-nu-* (§19.1.4) is used in conjunction with the inferential to insist on the
 29120 non-volitional character of a particular action, as in (209).

- 29121 (209) *jx-nui-jmut-a*
 IFR-AUTO-forget-1SG
 29122 ‘I forgot.’ (many attestations)

29123 With non-volitional perception verbs such as *mto* ‘see’ and *mts^hym* ‘hear’, Inferential first person negative can be employed to express failure to perceive (210)
 29124 (see also example 220, §21.5.3.2), or alternatively to state that the speaker has not
 29125 witnessed a fact of doubtful truthfulness (211).

- 29127 (210) *juufcur a-<dianhua> jx-tur-lxt ri muu-pjy-mts^ham-a,*
 yesterday 1SG.POSS-telephone IFR-2-release LNK NEG-IFR-hear-1SG
 29128 *k^ha pui-a-ta tce*
 house PST.IPFV-PASS-put LNK
 29129 ‘Yesterday when you called (me) on the phone, I did not hear it, as (I was
 29130 away and) had left the phone at home.’ (conversation, 2015-06-18)
- 29131 (211) *nxzo kuu-fse a-ηk^hor nuu muu-pjy-mto-t-a*
 2SG SBJ:PCP-be.like 1SG.POSS-subject DEM NEG-IFR-see-PST:TR-1SG
 29132 ‘I have never seen anyone like you among my subjects.’ (Smanmi 2003-2,
 29133 347)

29134 **21.5.2.4 Change of state**

29135 When used with stative verbs, the Inferential Perfective expresses change of state,
 29136 like the Aorist (§21.5.1.3) and the Imperfective (§21.2.6). In (212), *mpçyr* ‘be beau-
 29137 tiful’ thus means ‘become beautiful’ in the Inferential.

- 29138 (212) *myzui zo to-mpçyr*
 even.more EMPH IFR-be.beautiful
 29139 ‘(The Phoenix) became even more beautiful than before.’ (150901
 29140 bainiaochaofeng-zh, 76)

29141 The verb *cʰa* ‘can’, which normally selects the DOWNWARDS orientation (§21.5.3.1)
 29142 to express both Imperfective Inferential/Past Imperfective (‘was able to do X’)
 29143 and Inferential/Aorist (‘succeeded in doing X’), has an inchoative meaning ‘be-
 29144 came able to do X’ when occurring with the UPWARDS orientation, as shown by
 29145 (213) (see also 17, §24.2.3.1).

- 29146 (213) *murmumbju u-pui numui [...] u-tuymaz ra*
 swallow 3SG.POSS-little.one DEM 3SG.POSS-wound PL
 29147 *to-mna tce, nu-nuqambumbjom to-cʰa.*
 IFR-be.better LNK IPFV-fly IFR-can
 29148 ‘The swallow’s wounds got better, and it became able to fly.’ (150825
 29149 huluwa-zh, 44-45)

29150 **21.5.2.5 Subordinate clauses**

29151 The Inferential rarely appears in subordinate clauses, as in most contexts the con-
 29152 trast between Aorist and Inferential is neutralized, and only the former is attested.
 29153 In particular, in finite relative clauses, the Inferential is not found (§21.5.1.6).

29154 In complement clauses, the Inferential is only found when the verb of the main
 29155 clause is also in the Inferential, as in (214).

- 29156 (214) *nimawozyr nuu kuu, [srūnmui nuu pjy-ftul], [...] rŋguw*
 ANTHR DEM ERG râkshasî DEM IFR-subdue boulder
 29157 *ky-kuu-nyxtycyn ra pjy-ftul], tce icqʰa srūnmui nuu yuu*
 AOR-SBJ:PCP-be.fierce PL IFR-subdue LNK FILLER râkshasî DEM GEN
 29158 *uu-kuu-ra nuura [smynmimitobkucana ri*
 3SG.POSS-SBJ:PCP-be.needed DEM:PL ANTHR also
 29159 *c-ko-nybdyn] pjy-cʰa*
 TRAL-IFR:EAST-invite IFR-can
 29160 ‘Nyima ’Odzer had subdued the râkshasî, subdued the magical boulders,

29161 and also succeeded in inviting Smanmi Meto Koshana to the east, what
 29162 the râkshasî had requested. (2011-04-smanmi, 261-263)

29163 In this sentence, the scope of the verb *pjy-cʰa* is ambiguous: it could be re-
 29164 stricted to the last verb *c̚-ko-nyɛdyn*, but could also be understood as encompass-
 29165 ing the first two clauses (whose main verb is *pjy-ftuł*).

29166 Examples of Inferential in the protasis of conditional constructions are pre-
 29167 sented in §25.2.1 (example 16).

29168 21.5.3 Past Imperfective and Inferential Imperfective

29169 21.5.3.1 Morphology

29170 The Past Imperfective and Inferential Imperfective are built exactly in the same
 29171 way as Aorist (§21.5.1.1) and Inferential Perfective (§21.5.2.1), but with the DOWN-
 29172 WARDS preverbs *pui-* and *pjy-* instead of the preverb corresponding to the intrin-
 29173 sic lexicalized orientation, a peculiarity observed in most Gyalrong varieties (Lin
 29174 2011). Thus, verbs selecting DOWNWARDS as their intrinsic orientation present
 29175 syncretism between Aorist and Past Imperfective, and between Inferential and
 29176 Imperfective Inferential.

29177 For instance, the form *pui-rom* of the verb *rom* ‘be dry’, which selects the DOWN-
 29178 WARDS orientation, can either be interpreted as an Aorist ‘it became dry/when it
 29179 becomes dry’ (§21.5.1.1) or as a Past Imperfective ‘it was dry’.

29180 Another case of syncretism is provided by the modal verb *cʰa* ‘can’ which takes
 29181 the DOWNWARDS orientation to express the meaning ‘succeed in doing X’ (where
 29182 X refer to the content of the complement clause), as the Inferential Perfective *pjy-*
 29183 *cʰa* in (215).

- 29184 (215) [zdum kui-ŋaŋ nui cʰy-suu-jyxt] *pjy-cʰa*
 29185 cloud SBJ:PCP-be.black DEM IFR:DOWNSTREAM-CAUSE-turn.back IFR-can
 29186 *nui-ŋu.*
 29187 SENS-be

29188 ‘He succeeded in making the black cloud turn back.’ (25-kAmYW, 70)

29189 When the verb of the complement clause is in the Imperfective, the same form
 29190 *pjy-cʰa* is rather an Inferential Imperfective, and means ‘s/he was able to do X’
 29191 instead, as in (216).

- 29192 (216) *cʰui-myci-ndzi mui-pjy-cʰa-ndzi*
 29193 IPFV-be.rich-DU NEG-IFR.IPFV-can-DU
 29194 ‘They were unable to become rich.’ (Divination, 7)

29192 In Japhug, not all verbs have Past and Inferential Imperfective forms. Only
 29193 stative verbs (including adjectives, existential verbs, copulas and passive verbs,
 29194 §18.1.1), some stative transitive verbs with (such as tropative verbs, §17.5.2) and
 29195 some atelic intransitive dynamic verbs (such as *rṛzi* ‘stay’) are compatible with
 29196 these two TAME categories in main clauses. Table 21.7 provides examples of these
 29197 three categories of verbs, with minimal pairs taken from the text corpus.

Table 21.7: Examples of contrast between Inferential Perfective and Imperfective

Type	Inferential Perfective	Inferential Imperfective
Stative	<i>to-mpçyr</i> ‘s/he became beautiful’	<i>pjy-mpçyr</i> ‘s/he was beautiful’
Tropative	<i>jny-njy-mpçyr</i> ‘s/he found him/her/it beautiful’	<i>pjy-njy-mpçyr</i> ‘s/he was finding him/her/it beautiful’
Atelic dynamic	<i>ko-rṛzi</i> ‘s/he stayed (there)’	<i>pjy-rṛzi</i> ‘s/he was staying (there)’

29198 Atelic dynamic intransitive verbs include the following: some verbs of location
 29199 such as *rṛzi* ‘stay’, some modal verbs such *rga* ‘like’ and *cʰa* ‘can’, antipassive verbs
 29200 (§18.6.6) and also some verbs expressing activities requiring a certain amount of
 29201 time such as *tar* ‘weave’ or *ryma* ‘work’.

29202 Like the Aorist and the Perfective Inferential, the Past and Inferential Imperfec-
 29203 tive require the past suffix *-t* in the 1/2→3 forms of open syllable stem transitive
 29204 verbs (§11.3, §21.1.3). However, since only very few transitive verbs are compati-
 29205 ble with these two categories, relevant examples such as (217) are very rare (see
 29206 also 226, §21.5.3.4).

- 29207 (217) *pui-njy-pe-t-a*
 PST.IPFV-TROP-be.good-PST:TR-1SG
 29208 ‘I used to like it.’ (elicited)

29209 Most transitive verbs need to take the progressive *asw-* prefix (§21.6.1) build
 29210 Past and Inferential Imperfective forms. The peg circumfix *k-...-ci* is inserted be-
 29211 tween the *pjy-* preverb and the progressive prefix (§11.4) in first and third person
 29212 forms (§21.5.2.1), as shown by (218). The past transitive suffix *-t* does not occur
 29213 with the progressive (§21.6.1).

- 29214 (218) *rgynmua nua kur li icq^ha <yuwang> nua*
 old.woman DEM ERG again the.aforementioned net DEM
 29215 *pjy-k-ysui-tṣuβ-ci*
 IFR.IPFV-PEG-PROG-sew-PEG
 29216 ‘The old woman was sewing nets (like before).’ (140430 yufu he tade
 29217 qizi-zh, 297)

29218 One context however where all verbs appear to be found without restriction in
 29219 the Past Imperfective is in the apodosis of counterfactual conditionals (§21.5.3.4).

29220 In other cases, the Periphrastic Past and Inferential Imperfective (§21.5.3.5) are
 29221 used instead.

29222 21.5.3.2 Main clauses

29223 In main clauses, the Past and Inferential Imperfective indicate a previous state or
 29224 habitual situation. For instance, in (219), the use of the Past Imperfective to refer
 29225 to the presence of warts (*pui-tu* ‘there used to be’ and *pui-dyn* ‘there were many’) is
 29226 necessary because of their subsequent disappearance, explicitly mentioned in
 29227 the following clauses.

- 29228 (219) *a-jas ri li kuitkura ntsui pui-tu tce*
 1SG.POSS-hand LOC again DEM.PROX:PL always PST.IPFV-exist LNK
 29229 *pui-dyn. tceri nua u-q^hu li icq^ha stu*
 PST.IPFV-be.many LNK DEM 3SG.POSS-after again FILLER MOST
 29230 *kui-m^hku nua-kui-los nua-nua-me q^he tce*
 SBJ:PCP-be.first AOR-SBJ:PCP-come.out AOR-AUTO-not.exist LNK LNK
 29231 *ŋy-nua-me*
 IFR-AUTO-not.exist
 29232 ‘I had (warts) on my hand there, and there were a lot. But later, the
 29233 (wart) that had first come out disappeared by itself, and (the rest)
 29234 disappeared.’ (24-pGArtsAG, 49-50)

29235 The Past and Inferential Imperfective also express an ongoing process in the
 29236 past, during which additional events have occurred, as in (220).

- 29237 (220) *juſcuar k^hu~k^hro zo jo-tui-lyt ri mu-pjy-mts^ham-a ma*
 yesterday EMPH~much EMPH IFR-2-release LNK NEG-IFR-hear-1SG LNK
 29238 *k^hamu pui-asui-βzu-a*
 cooking PST.IPFV-PROG-make-1SG
 29239 ‘Yesterday you called (me) many times (on the phone), but I did not hear
 29240 it, as I was cooking.’ (conversation, 14-12-2018)

29241 In combination with the Autive, the Past Imperfective can convey permansive
 29242 meaning (§19.1.5), as in (221).

- 29243 (221) *tc^heme nu-nuuk^hnda-t-a ri, múa-j-p^hyn, tce*
 girl AOR-convince-PST:TR-1SG LNK NEG:SENS-be.efficient LNK
 29244 *pua-nui-yrwu cti*
 PST.IPFV-AUTO-cry be.AFF:FACT
 29245 ‘I comforted the girl, but to no avail, she was still crying.’ (2003
 29246 zrantCWtWrme, 61)

29247 The Inferential Imperfective is the standard TAME category used in traditional
 29248 stories to describe states and ongoing actions, as illustrated by the chain of verbs
 29249 marked in red in (222). It is the counterpart of the Inferential Perfective in narra-
 29250 tive function (§21.5.2.2).

- 29251 (222) *pra^hk^haŋ ci pjy-tu q^he, prask^haŋ u-ŋgwu nutcu*
 cave INDEF IFR.IPFV-exist LNK cave 3SG.POSS-inside DEM:LOC
 29252 *pjy-fsoꝝ. nuu u-rkua nuara rcanu, li nykinu,*
 IFR.IPFV-be.bright DEM 3SG.POSS-side DEM:LOC UNEXP:FOC again FILLER
 29253 *si ra pjy-k-yrji-ci zo. nykinu, muntoꝝ kumy wuma*
 tree PL IFR.IPFV-PEG-be.green-PEG EMPH FILLER flower also really
 29254 *zo pjy-dyn, tce pjy-sy-scit. [...]*
 EMPH IFR.IPFV-be.many LNK IFR.IPFV-PROP-be.happy
 29255 *u-ŋgwu lo-ce ri, tce numutcu rg̥tpu xsum kui,*
 3SG.POSS-inside IFR:UPSTREAM-go LNK LNK DEM:LOC old.man three ERG
 29256 *nyki, kumbryl pjy-k-ysu-lxt-nuu*
 FILLER chess IFR.IPFV-PEG-PROG-release-PL
 29257 ‘There was a cave. Inside the cave, there was light. Around it, the trees
 29258 were green, and there were many flowers, it was a very nice (place). (...)
 29259 He entered (the cave), and in there there were three old men playing
 29260 chess.’ (150902 qixian-zh, 111-118)

29261 21.5.3.3 Temporal clauses

29262 The Past Imperfective, like the Aorist (§21.5.1.4), is used in temporal subordinate
 29263 clauses. The clause in the Past Imperfective expresses an ongoing process in the
 29264 middle of which the event referred to in the main clause (in the Aorist or in the
 29265 Inferential Perfective) takes place, as illustrated by (223).

- 29266 (223) *wuma zo puu-asuu-ndza-ndzi, puu-pe jamar zo tce*
 really EMPH PST.IPFV-PROG-eat-DU PST.IPFV-be.good about EMPH LNK
 29267 *tcendyre, nuna, nyki, kʰa nuu yuu ui-kum to-njw*
 LNK DEM FILLER house DEM GEN 3SG.POSS-door IFR-ACAUS:open
 29268 ‘While/Right at the moment when they were eating (the sweets) in big
 29269 quantity and were (enjoying it), the door of the house opened.’ (140507
 29270 tangguowu-zh, 85-87)

29271 21.5.3.4 Apodosis

29272 The Past Imperfective is also used in the apodosis of counterfactual conditionals
 29273 (with an Irrealis in the protasis, §21.4.1.5), as shown by the form *puu-pe* in (224).

- 29274 (224) *nuna muyzusapa nuu tceki nuu tce a-puu-y-ryt tce*
 29275 DEM TOPO DEM down DEM LOC IRR-IPFV-PASS-write LNK
 29276 *puu-pe ma*
 29277 PST.IPFV-be.good LNK
 29278 ‘It would have been better if (the name) *muyzusapa* had been written
 down there (on a sheet of paper where many names of locations in the
 mountains had been written).’ (140522 Kamnyu zgo, 82)

29279 In this very restricted context, all verbs can have a Past Imperfective form.
 29280 For instance, *rpu* ‘bump into’ (§14.5.2), which normally selects the EASTWARDS
 29281 orientation (the preverb *k̪y-* in 225), takes the *puu-* Past Imperfective preverb in
 29282 (226).

- 29283 (225) *ny-kʰa jy-ye-a ri, a-ku*
 29284 2SG.POSS-house AOR-come[II]-1SG LNK 1SG.POSS-head
k̪y-nuu-rpu-t-a
 29285 AOR-AUTO-bump-PST:TR-1SG
 29286 ‘When I came to your house, I bumped my head (on the door frame).’
 (elicited)

- 29287 (226) *ny-kʰa jy-ye-a ri, a-ku pjuu-pʰaβ-a*
 29288 2SG.POSS-house AOR-come[II]-1SG LNK 1SG.POSS-head IPFV-lower-1SG
a-puu-ŋu tce muu-puu-nuu-rpu-t-a.
 29289 IRR-IPFV-be LNK NEG-PST.IPFV-AUTO-bump-PST:TR-1SG
 29290 ‘When I came to your house, if I had lowered my head, I wouldn’t have
 bumped it (into the door frame).’ (elicited)

29291 The Inferential Imperfective is not attested in this construction.

29292 21.5.3.5 Periphrastic Past and Inferential Imperfective

29293 Only atelic verbs, in particular stative verbs, are compatible with Past Imperfec-
 29294 tive and Inferential Imperfective (§21.5.3.1) in contexts other than the apodosis
 29295 of counterfactuals (§21.5.3.4).

29296 To express the meanings otherwise conveyed by the Past Imperfective with
 29297 telic verbs, two strategies are possible. First, the Progressive *asw-* makes all trans-
 29298 sitive verbs compatible with these two tenses (§21.5.3.1, §21.6.1). Second, the Pe-
 29299 riphastic Past Imperfective and Inferential Imperfective, which combine the Im-
 29300 perfective form of the verb with the copula in the Past Imperfective *pui-ŋu* and
 29301 the Inferential Imperfective *pjy-ŋu*, respectively (§21.2.2). For instance, instead of
 29302 the incorrect form *tpjy-ndza* (Inferential Imperfective of the telic transitive verb
 29303 *ndza* ‘eat’), the periphrastic construction in (227) is used.

- 29304 (227) *tu-ndze pjy-ŋu*
 IPFV-eat[III] IFR.IPFV-be
 29305 ‘S/he/it used to eat it/was eating it.’ (many examples)

29306 Just in the same way as the Aorist can be combined with the Sensory copula
 29307 *jnu-ŋu* to build the Periphrastic Narrative (§21.5.1.8), the Past Imperfective with
 29308 *jnu-ŋu* expresses an Periphrastic Imperfective Narrative, with the same meaning
 29309 as the Inferential Imperfective. For instance, the construction in (228) is equiva-
 29310 lent to the Inferential Imperfective *pjy-taš* (IFR.IPFV-weave) ‘s/he was weaving’.

- 29311 (228) *tcʰeme ci pui-taš jnu-ŋu*
 girl INDEF PST.IPFV-weave SENS-be
 29312 ‘A girl was weaving.’ (2003 tWxtsa, 29)

29313 21.5.4 Archaic form

29314 The archaic 3SG *kʰuu-ti* ‘s/he said’ and 3PL *kʰuu-ti-nuu* ‘they said’ forms with the
 29315 isolated preverb *kʰuu-*, are attested in a few occurrences in stories told by Tshen-
 29316 dzin’s mother. They are glossed by Tshendzin with the Inferential forms 3SG→3
 29317 *to-ti* and 3PL→3 *to-ti-nuu*, respectively.

- 29318 (229) “*cuu kuu nuu-túu-wy-mbi tx-ti ma mry-jyy*”
 who ERG AOR-2-INV-give IMP-say apart.from NEG-be.possible:FACT
 29319 *kʰuu-ti-nuu*.
 ???-say-PL
 29320 ‘Who gave this to you, you must tell us.’ (2003-kWBra, 79)

These forms are not found in texts by younger speakers. No other trace of this preverb is found in Japhug. A possible origin for it would be the hearsay sentence final particle *kʰi* (§10.4.3), which sometimes occur in the reported speech complements (§24.2.5.1) of the verb *ti* ‘say’, sometimes even in direct contact with the stem of this verb as in (230), in its irregular preverbless inferential form (§21.3.1.4).

- (230) “*ny-kycl ny-brw nwi pjuu-tuu-p^hut tce*
 2SG.POSS-top.of.head 2SG.POSS-horn DEM IPFV-2-take.off LNK
k^y-nwi-ce pjuu-k^hu k^hi” ti pjuu-nyu
 INF-AUTO-go SENS-be.possible SFP say:FACT SENS-be
 ‘He said: “If you remove the horn on the top of your head, it will be
 possible for you to go wherever you want.”’ (divination 2005,101)

The preverb *k^hu-* would thus result from the procliticization and eventual absorption of a sentence final particle from a preceding clause into the verbal word, a scenario similar to that proposed for the Apprehensive *çuu-* (§21.7.1.3). If this hypothesis is correct, the form *k^hu-ti* may not be the residual form from an ancient paradigm, but rather an unsuccessful Japhug innovation that has eventually died out.

21.6 Secondary Aspectual categories

There are two secondary aspectual prefixes in Japhug, the Progressive (§21.6.1) and the Proximative (§21.6.2). They can be combined with several primary TAME categories, but cannot occur together in the same verb form.

21.6.1 Progressive

21.6.1.1 Morphology

The Progressive prefix *asu-* is located in slot -1 of the outer prefixal template (§11.2.1). It is only compatible with transitive verbs, and does not appear with perfective TAME categories such as Aorist and Inferential Perfective. Its is almost only attested with finite verb forms; the only examples of non-finite Progressive forms are object participles (see example 60, §16.1.2.2).

The Progressive prefix has six regular allomorphs, as shown in Table 21.8. The monosyllabic variants *az-*, *-vz-* and *-oz-* are found in the same context as the *z-* allomorph of the sigmatic causative (§17.2.1.1): in non-monosyllabic verb bases, when the first syllable has a sonorant initial (*mV-*, *nV-*, *yV-* or *rV-*). They are illustrated with the verb *nxjo* ‘wait’ in Table 21.8. The disyllabic allomorphs *asu-*,

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29352 -*rsu-* and -*osu-* are found in all other contexts (illustrated with the monosyllabic
 29353 *ndza* ‘eat’ in Table 21.8).

Table 21.8: Allomorphs of the Progressive prefix

Allomorph	Context	Examples
<i>asu-</i>	Factual	<i>asu-ndza</i> PROG-eat:FACT
	Past Imperfective	<i>pui-asu-ndza</i> PST.IPFV-PROG-eat
<i>az-</i>	Factual	<i>az-nyjo</i> PROG-wait:FACT
	Past Imperfective	<i>pui-az-nyjo</i> PST.IPFV-PROG-wait
<i>rsu-</i>	Sensory	<i>pui-rsu-ndza</i> SENS-PROG-eat
	Inferential	<i>pjyr-k-rsu-ndza-ci</i> IFR.IPFV-PEG-PROG-eat-PEG
<i>yz-</i>	Sensory	<i>pui-yz-nyjo</i> SENS-PROG-wait
	Inferential	<i>pjyr-k-yz-nyjo-ci</i> IFR.IPFV-PEG-PROG-wait-PEG
<i>osu-</i>	Egophoric Present	<i>ku-osu-ndza-a</i> PRS-PROG-eat-1SG
<i>oz-</i>	Egophoric Present	<i>ku-oz-nyjo-a</i> PRS-PROG-wait-1SG

29354 The vocalism of this prefix follows the same alternations as the initial *a-* of
 29355 contracting verbs (§12.3).

29356 The *asu-/az-* allomorphs are found in word-initial position, in first or third
 29357 person Factual Non-Past (see for instance 240), following the Past Imperfective
 29358 *pui-*, with the negative *mr-* and the Rhetorical Interrogative *wþr-* (§21.7.3, *wþr-
 29359 asu-ndo* RH.Q-PROG-take:FACT ‘it does not have (this colour), does it?’).

29360 The -*osu-/oz-* allomorphs are restricted to Egophoric Present forms with the
 29361 prefix *ku-* (§21.3.3.1).

29362 The *-ysuu-/yz-* allomorphs are the most common, attested with the Sensory
 29363 *jnu-*, with the peg circumfix (§11.4, in Inferential Imperfective form) and also in
 29364 the Irrealis Imperfective with the preverb *pui-* (for instance *a-pui-ysuu-ndo* IRR-
 29365 IPFV-PROG-take ‘may it have (this colour?’).

29366 Like contracting verbs, the Progressive prefix selects the peg circumfix *kuu-...-ci*
 29367 (§11.4) in the Inferential Imperfective (§21.5.3.1), as shown by the form *pjy-k-ysuu-*
 29368 *car-ci* ‘it was searching/looking for it’ in (231).

- 29369 (231) *sun̥gwa nutcu, nykinu, wuma zo spjaŋkuu kuu-mtsur ci*
 forest DEM:LOC FILLER really EMPH wolf SBJ:PCP-be.hungry INDEF
 29370 *pjy-tu. tcendyre nuunutcu u-kx-ndza abyndundyt*
 IFR.IPFV-exist LNK DEM:LOC 3SG.POSS-OBJ:PCP-eat everywhere
 29371 *pjy-k-ysuu-car-ci.*
 IFR.IPFV-PEG-PROG-search-PEG
 29372 ‘In the forest, there was a wolf, and he was looking for food there
 29373 everywhere?’ (140428 xiaohongmao-zh, 29-30)

29374 The inverse (slot -1, §11.2.1) and the autive (inner prefix, §11.2.2) are *infixed*
 29375 within the progressive, as shown by (232) and (233) (see also 2 in §11.2.1, 8 in
 29376 §11.2.2 and 5 in §19.1.2).

- 29377 (232) *pui-tu-́y<wy>z-naukʰramba*
 SENS-2-PROG<INV>-cheat
 29378 ‘S/he is cheating you.’ (elicited)

- 29379 (233) *u-ŋga cʰy-Ngrab ldzyβldzyβ zo ri,*
 3SG.POSS-clothes IFR-ACAUS-tear IDPH(II):in.shreds EMPH LNK
 29380 *pui-́y<nua>sui-ŋga*
 SENS-PROG<AUTO>-wear
 29381 ‘His clothes are torn to shreds, but he is still wearing them.’ (elicited)

29382 When both inverse and autive are combined with the Progressive, the *-su/z-*
 29383 element is removed, and only the first vowel of the Progressive remains, as in
 29384 (234).

- 29385 (234) *u-zda kuu pui-́y-wy-nui-nyjo*
 3SG.POSS-companion ERG SENS-PROG-AUTO-wait
 29386 ‘His_i companion is waiting for him_i.’ (elicited)

29387 An irregular allomorph *-ys-* is found in the Sensory Progressive *jnu-ys-tut* (SENS-
 29388 PROG-say[II]) ‘s/he is saying/said’ of the verb *ti* ‘say’ (§21.3.2.1), a form also un-
 29389 unusual by the presence of Stem II.

29390 Transitive verbs with the Progressive prefix lack some of the morphological
 29391 exponents of transitivity (§14.3.1).

29392 First, in Sensory, Egophoric, Irrealis and Factual, Stem III alternation does not
 29393 occur in SG→3 configurations of alternating verbs (§12.2.2); for instance, the
 29394 Progressive Sensory 3SG→3’ of *ndza* ‘eat’ is *jnu-ysu-nzda* (SENS-PROG-eat) ‘s/he/
 29395 it is eating it’ with Stem I, unlike the plain Sensory *jnu-ndze* which selects Stem
 29396 III (see example 14, §21.2.2). Combining Stem III with the Progressive (something
 29397 like †*jnu-ysu-nzde*) is categorically rejected by native speakers.

29398 Second, the past *-t* suffix (§21.1.3) does not occur in 1/2SG→3 forms of Past Im-
 29399 perfective and Inferential Imperfective of verbs with the Progressive prefix. For
 29400 instance, the 1SG→3SG form *pui-asu-βzu-a* (PST.IPFV-PROG-make-1SG) ‘I was mak-
 29401 ing it’ (see for instance example 220, §21.5.3.2) lacks the *-t* suffix, and inserting it
 29402 (†*pui-asu-βzu-t-a*) is not accepted by speakers.

29403 Other exponents of transitivity, such as C-type preverbs (§14.3.2.2), subject par-
 29404 ticiples (§16.1.1.1) and bare infinitives (§16.2.2) cannot be tested, due to the incom-
 29405 patibility of the Progressive with most non-Finite forms on the one hand, and the
 29406 undetectability of the *pui-/pa-* contrast when followed by the vowel contracting
 29407 *asu-:* the surface form /pasuβzu/ ‘s/he/it is making it’ is equally analyzable as
 29408 *pui-asu-βzu* (PST.IPFV-PROG-make) or as *pa-asu-βzu* (PST.IPFV:3→3’-PROG-make).
 29409 The former analysis is adopted in this grammar.

29410 The 1→2 *ta-* seems to be incompatible with the progressive. For instance, to
 29411 express the meaning ‘I am waiting for you’, only the simple Egophoric Present *kut-
 29412 ta-nyjo* (PRS-1→2-wait) is possible, the surface form /kutaznyjo/ can only be ana-
 29413 lyzed as a causative Imperfective *ku-ta-z-nyjo* (IPFV-1→2-CAUS-wait) ‘I will have
 29414 you wait for him’, not as an Egophoric Progressive †*ku-ta-γz-nyjo*.

29415 Other person configurations, including inverse mixed scenarios 3→1/2 (§14.3.2.1)
 29416 and local scenario 2→1 (§14.3.2.3) can be elicited with the Progressive, as in (232)
 29417 and (235), though no such examples have yet been found in the corpus.

- 29418 (235) *jnu-kui-ysu-zgrob-a*
 SENS-2→1-PROG-attach-1SG
 29419 ‘You are attaching me.’ (elicited)

29420 21.6.1.2 Functions

29421 The Progressive indicates the non-telicity of the verbal action. It occurs in the
 29422 case of ongoing actions (including events be protracted for a long time period,

- 29423 as in (236), and also habitual actions (237) (see also 98 and 94 in §21.3.3.4).
- 29424 (236) *sryz yuu juam ku-osui-car-i, lu χsuw-xpa puu-ŋke-j*
 prince GEN wife PRS-PROG-search-1PL year three-year PST.IPFV-walk-1PL
 29425 *puu-ra ri*
 PST.IPFV-be.needed LNK
 ‘We are looking for the prince’s wife, we had to walk for three years.’
 29427 (2003sras, 58)
- 29428 (237) *akuu <xianzhong> ri <chuzhong> ku-osui-βzjoz.*
 east district.school LOC junior.high.school PRS-PROG-learn
 29429 ‘She is reading junior high school at the district school.’ (14-siblings, 370)
- 29430 With the Factual and the Sensory, the Progressive precludes an imminent fu-
 29431 ture interpretation (§21.3.1.2). For instance *tuu-mu asu-lst* in (238) means ‘(when)
 29432 it is raining’ (as part of general knowledge), while the corresponding plain Fac-
 29433 tual *tuu-mu lst* (239) is to be understood as ‘it will rain’.
- 29434 (238) *ma tx̥e me nutcu tce, zdum lu-yi*
 LNK sun not.exist:FACT DEM:LOC LNK cloud IPFV:UPSTREAM-come
 29435 *ŋu tce, nuu u-nгуu nuara, tuu-mu*
 be:FACT LNK DEM 3SG.POSS-in DEM:PL INDEF.POSS-sky
 29436 *kuu-xtciu~xtci zo asui-lst tce tce nunuu*
 SBJ:PCP-EMPH~be.small EMPH PROG-release:FACT LNK LNK DEM
 29437 *βyvrtshи wuma zo dyn.*
 mosquito really EMPH be.many:FACT
 29438 ‘When the sun has not appeared (yet, in the morning), when clouds
 29439 come, and there is a little rain, the mosquitoes are particularly many.’
 29440 (25-RmArYWG, 38-39)
- 29441 (239) *nunu qaprγŋar kuu zdum tu-tcxt ŋu tce tuu-mu*
 DEM TOPO ERG cloud IPFV-take.out be:FACT LNK INDEF.POSS-sky
 29442 *lst tu-ti-nuu ŋγryl*
 release:FACT IPFV-say-PL be.usually.the.case:FACT
 29443 ‘(The snake from) Qaprangar is releasing clouds, and it will rain.’
 29444 (140522 Kamnyu zgo-zh, 335)
- 29445 The verb *ndo* ‘take’ requires the Progressive in all its finite forms in the stative
 29446 collocation *uu-mdor + ndo* ‘have the colour of’, as in (240) (†*uu-mdor ndym* is not
 29447 attested).

- 29448 (240) *kuki u-mdob zo asuu-ndo.*
 DEM.PROX 3SG.POSS-colour EMPH PROG-take:FACT
 29449 ‘It has this colour.’ (23-mbrAZim, 6)
- 29450 The Progressive makes transitive dynamic verbs compatible with the Past Im-
 29451 perfective and Inferential Imperfective (§21.5.3.1). These forms can express previ-
 29452 ous habitual actions ('use to X') that have ceased to occur, as in (241) and (243),
 29453 or past ongoing actions (242).
- 29454 (241) *tce abyndundyt zo <dagong> ntsui puu-asuu-βzu tce*
 LNK everywhere EMPH work.for.salary always PST.IPFV-PROG-make LNK
 29455 *nyki, puu-nuŋgra ntsui ri, japa ri tce, [...]*
 FILLER PST.IPFV-work.for.salary always LNK last.year LOC LNK
 29456 *<kaoshi> puu-cʰa*
 examination AOR-can
 29457 ‘She used to do migrant work everywhere, but last year (...) she
 29458 succeeded in the exam (to become a civil servant).’ (12-BzaNsa, 77)
- 29459 (242) *azo kuukure ri juysi puu-asuu-rtos-a cti tce, maka*
 1SG DEM:LOC LOC book PST.IPFV-PROG-look-1SG be.AFF:FACT LNK at.all
 29460 *puu-mto-t-a maka me*
 AOR-see-PST:TR-1SG at.all not.exist:FACT
 29461 ‘I was here reading books, I did not see anything.’ (150901 dongguo
 29462 xiansheng he lang-zh, 60-61)
- 29463 Example (243) illustrates the tense contrast between the Progressive Past Im-
 29464 perfective *puu-asuu-ndza-a* ‘I was eating/used to eat it’ (previous habitual) and the
 29465 Progressive Egophoric Present *ku-osuu-ndza-a* ‘I am eating it’ (present habitual).
- 29466 (243) *woja nuu cunqas kumas smyn, nunuu kui-fse*
 INTERJ DEM before other medicine DEM SBJ:PCP-be.like
 29467 *<gaipian> puu-tu nunuu puu-asuu-ndza-a. tce nuu*
 calcium.tablet PST.IPFV-exist DEM PST.IPFV-PROG-eat-1SG LNK DEM
 29468 *tʰui-arco kɔmuz ny, nyzo ky-tui-sui-yut nuu*
 AOR-be.finished.up only.then ADD 2SG aor:east-2-CAUS-bring DEM
 29469 *tu-ndze-a. nyzo ky-tui-suyut nunuu, <gaipian>*
 IPFV-eat[III]-1SG 2SG aor:east-2-CAUS-bring DEM calcium.tablet
 29470 *nuu-ŋu ye, tce nuu ku-osuu-ndza-a.*
 SENS-be SFP LNK DEM PRS-PROG-eat-1SG
 29471 ‘Before that I had another medicine, (another) calcium tablet like that,
 29472 and it was the one I was taking. I (started) taking the (medicine) you

29473 have sent me when (the previous one) was finished up. The (medicine)
 29474 you have sent me, calcium tablet, I am taking it (now).' (conversation
 29475 17-08-21)

29476 Temporal clauses with the Progressive and the relator noun *w-ray* 'the time
 29477 when, while' can express simultaneity with the action of the main clause (§25.3.4.1).
 29478 In this construction, the verb can be in the Factual even when the main clause is
 29479 in the Aorist or the Inferential, as in (244).

- 29480 (244) *tce [tx-pytso ra kui az-nurdor-nu w-ray] zo*
 LNK INDEF.POSS-child PL ERG PROG-collect:FACT-PL 3SG.POSS-time EMPH
 29481 *tce tcendyre, zyni daltsutsa ny-zyy-su-yrq^{hi}-ndzi tce*
 LOC LNK 3DU slowly IFR-REFL-CAUS-be.far-DU LNK
 29482 'While the children were collecting (firewood, piece by piece), (their
 29483 parents) slowly moved away (from them).' (160630 poucet1, 48)

29484 When the subordinate and the main clauses share the same subjects, the verb
 29485 with the Progressive prefix in the subordinate clause can express the manner of
 29486 the action of the main clauses, as in (245).

- 29487 (245) *a-ty-lu to-χtui-ndzi, a-paxci ra to-χtui-ndzi,*
 1SG.POSS-INDEF.POSS-milk IFR-buy-DU 1SG.POSS-apple PL IFR-buy-DU
 29488 *<gongxun> kui izo ji-skxt nyu-ysuu-βzu tce,*
 ANTHR ERG 1PL 1PL.POSS-language SENS-PROG-make LNK
 29489 *ny-ty-lu c^ho ny-paxci ty-χtui-tci' nura*
 2SG.POSS-INDEF.POSS-milk COMIT 2SG.POSS-apple AOR-buy-1DU DEM:PL
 29490 *nyu-ti.*
 SENS-say
 29491 'They bought milk and apples for me, and Gong Xun (龚勋) said,
 29492 speaking in our language: 'We bought milk and apples for you'.
 29493 (conversation, 17-08-21)

21.6.1.3 History

29495 The Japhug Progressive prefix *asuu-* is obviously related to the Tshobdun *psv-* (Sun
 29496 & Shidanluo 2002: 89) and the Zbu *psv-/psə-* (Gong 2018: 199–201) progressive
 29497 prefixes, but no cognates are found in the rest of Gyalrongic, even in Situ. It is a
 29498 possible northern Gyalrong common innovation.

29499 As in Japhug, the Progressive *psv-* in Zbu and Tshobdun is incompatible with
 29500 Stem III and the past transitive -z suffix (cognate to Japhug -t, §21.1.3), but its

29501 distribution is considerably more restricted. Zbu *psp*- is not compatible with ori-
 29502 entation preverbs and the inverse prefix; the allomorph *psə-* optionally occurs
 29503 with verbs taking the sigmatic causative prefix (Gong 2018: 199–200).

29504 The infixability of the inverse and the autive prefixes within the Progressive in
 29505 Japhug (§21.6.1.1) is a clue that *asu*- and its cognates are etymologically composite,
 29506 comprising two elements *a*- and *-su*- . Possible candidates for the former include
 29507 the Passive (§18.1) and the Denominal *a*- (§20.2.1), and for the latter the oblique
 29508 participle *sr*- (§16.1.3) or the sigmatic causative *su*- (§17.2).

29509 21.6.2 Proximative

29510 The Proximative *ju*-, located in slot -6 of the outer prefixal chain (§11.2.1), corre-
 29511 sponds to the Tshobdun *jə*- prefix (Prospective 前瞻体, Sun 2008: 142–143) and
 29512 the Zbu *jə*- or *wo*- prefixes (depending on the dialect, Gong 2018: 9;201-202).

29513 It mainly appears in the corpus in combination with the Aorist (246, 247) or
 29514 the Inferential (248, 249) expressing that the action was almost realized, but not
 29515 completed. The adverb *zumi* ‘almost’ is commonly used together with the prox-
 29516 imative, as in (246) and (247).

- 29517 (246) *u-nmas nui japandzi ri, wuma zo t̪y-ngo tce*
 3SG.POSS-husband DEM the.year.before LOC really EMPH AOR-be.ill LNK
 29518 *zumi zo ju-nui-si*
 almost EMPH PROXM-AOR-die
 29519 ‘Her husband became sick a few years ago, and almost died.’ (14-siblings,
 29520 356)

- 29521 (247) *zumi ju-púa-wy-sat-a.*
 almost PROXM-AOR-INV-kill-1SG
 29522 ‘He almost killed me.’ (150901 dongguo xiansheng he lang-zh, 139-141)

- 29523 (248) *u-lu zo ju-pjy-cui, tuu-mu kuu*
 3SG.POSS-faint(1) EMPH PROXM-IFR-faint(2) NMLZ:ACTION-fear ERG
 29524 ‘He almost fainted out of fear.’ (150909 hua pi-zh, 73)

29525 The non-realized action can be deemed undesirable (as in 246 to 248 above),
 29526 but may also be an aim that the subject tried but failed to realize as in (249).

- 29527 (249) *χsur-ttxur juu-ko-ce* *zo tce, tce tce, nuu ma*
 three-turn PROXM-IFR:EAST-go EMPH LNK LNK LNK DEM apart.from
 29528 *muu-ŋy-c^ha tce*
 NEG-IFR-can LNK
 29529 'He almost completed (was about to complete) the third lap, but could
 29530 not (run) any more.' (2003sras 110-111)

29531 The Proximative combined with the Factual Non-Past has the meaning 'be
 29532 about to do'. It is generally attested with a copula as in (250), like the Periphrastic
 29533 Proximative (§21.6.2.1).

- 29534 (250) *juu-nuuŋw^h* *zo nuu-ŋu*
 PROXM-sleep:FACT EMPH SENS-be
 29535 'He is about to fall asleep.' (elicited)

29536 With contracting verbs (§12.3) in the Factual Non-Past, the Proximative merges
 29537 with the contracting vowel as /ja-/ as in (251).

- 29538 (251) *juu-atar-a* *zo nuu-ŋu*
 PROXM-fall:FACT-1SG EMPH SENS-be
 29539 'I am about to fall down.' (elicited)

29540 This meaning is also found with participial forms, such as *juu-tu-kuu-wyrum* '(the
 29541 one) which is about to become white' in (252) (see also 92, §15.1.4.3).

- 29542 (252) *kua-pyi ci konla zo zuumi*
 SBJ:PCP-be.grey INDEF completely EMPH almost
 29543 *juu-tu-kua-wyrum kua-fse ci nuu-ŋu.*
 PROXM-IPFV-SBJ:PCP-be.white SBJ:PCP-be.like INDEF SENS-be
 29544 'It is grey, almost like it is about to become white.' (24-ZmbrWpGa, 34)

29545 A more marginal meaning of the Proximative in subordinate clauses is 'as soon
 29546 as' (with completion of the verbal action), as in (253).

- 29547 (253) *unuumuu uu-ndzuy* *numuu a-puu-tu tce tcendyre, pya ra*
 DEM 3SG.POSS-resin DEM IRR-IPFV-exist LNK LNK bird PL
 29548 *juu-c-ku-zo-nuu tce tce kú-wy-ndo-nuu tce pjui-si-nuu*
 PROXM-TRAL-IPFV-land-PL LNK LNK IPFV-INV-take-PL LNK IPFV-die-PL
 29549 *pjui-ŋgryl nuu-ŋu.*
 IPFV-be.usually.the.case SENS-be
 29550 'If its resin appeared, birds would get stuck by it as soon as they land (on
 29551 the tree) and would die.' (140427 yanzi yu niaolei-zh, 9)

29552 21.6.2.1 Periphrastic proximative

29553 The Proximative is in competition with the Periphrastic Proximative constructions, which combines the Factual Non-Past with the 3SG copula in various TAME categories.

29556 With the Past Imperfective copula *pui-yu* (254) or the Inferential Imperfective
 29557 *pjy-yu* (255), the periphrastic construction means ‘was about to do X, almost/
 29558 nearly did X’.

- 29559 (254) *nduxpa naχpu yuu ui-tcw kuu a-tcw sat*
 ANTHR ANTHR GEN 3SG.POSS-son ERG 1SG.POSS-son kill:FACT
 29560 *pui-yu ri, jy-tui-sytuta-t tce*
 PST.IPFV-be LNK IFR-2-separate-PST:TR LNK

29561 ‘The son of Klu gdugpa nagpo was about to kill (almost killed) my son,
 29562 but you separated them.’ (28-smAnmi, 280)

- 29563 (255) *cymwydut lxt pjy-yu ri [...] jy-siuso tce*
 gun release:FACT IFR.IPFV-be LNK IFR-think LNK
 29564 ‘(The hunter) was about to shoot, but he thought ‘...’ (140428
 29565 xiaohongmao-zh, 145)

29566 The Aorist form *ty-yu* occurs in the Periphrastic Proximative construction in
 29567 temporal clause to fix a point in time (§21.5.1.4), either in the past or in the future
 29568 as (256) ‘when X will be about to Y’.

- 29569 (256) *nyzo tū-wy-caβ ty-yu tce, azo kuu ve nur*
 2SG 2-INV-catch.up:FACT AOR-be LNK 1SG ERG left DEM
 29570 *pui-ct^buz-a*
 IPFV:WEST-turn.towards-1SG
 29571 ‘When they will be about to catch up with you, I will turn my left (hand)
 29572 in their direction. (2011-04-smanmi, 145)

29573 In the non-past, the Periphrastic Proximative selects the Sensory copula *jnu-yu*, and expresses imminent future ‘is about to X’ as in (257) and (258). With
 29574 the copula in the Factual Non-Past, clear examples of proximative meaning are
 29575 difficult to ascertain, as postverbal copulas have additional functions (§22.5.3).

- 29577 (257) *wo a-wymuu ra my-tuu-yi-nur úr-ŋu ma,*
 INTERJ 1SG.POSS-brother PL NEG-2-come:FACT-PL QU-be:FACT LNK
 29578 *kui-ndza pnu-ŋu*
 GENR:S/O-eat:FACT SENS-be
 29579 ‘My brothers, aren’t you coming, (the râkshasî) is about to eat us!’
 29580 (28-smAnmi, 399)
- 29581 (258) *sy-rŋgu-rŋgu kumy tuu-kyrnor pnu-mtcuur tce, “atar-a*
 GER-lie.down also GENR.POSS-brain IPFV-turn LNK fall:FACT-1SG
 29582 *pnu-ŋu” ky-suiso zo ntc^hyr*
 SENS-be INF-think EMPH appear:FACT
 29583 ‘Even lying down, your head is dizzy, and it feels like you are about to
 29584 fall down.’ (29-tAmtshAzkAkWndo, 57-58)

29585 21.7 Secondary Modal categories

29586 Secondary Modal categories include the Probabilitative (§21.7.2), Rhetorical Inter-
 29587 rogative (§21.7.3) and Interrogative (§21.7.4) which can be combined with primary
 29588 TAME categories, and the Apprehensive (§21.7.1), which presents morphological
 29589 commonalities with the Aorist (§21.5.1.1).

29590 21.7.1 Apprehensive

29591 21.7.1.1 Morphology

29592 The Apprehensive prefix *cuu-* presents a series of unique morphological proper-
 29593 ties in Japhug. It occupies the slot -3 of the outer prefixal chain (§11.2.1), the same
 29594 as orientational preverbs (§15.1.1.1). It is the only finite TAME category apart from
 29595 the Factual Non-Past (§21.3.1) to lack orientation preverbs.

29596 On transitive verbs, the 3→3' direct form of the Apprehensive is *ca-*, with
 29597 a vowel alternation identical to that found with type C preverbs in the Aorist
 29598 (§14.3.2.2, §15.1.1.1, §21.1.1) as illustrated by the contrast between the intransi-
 29599 tive (Anticausative, §18.5.1) *cuu-ngruu* ‘(I am afraid that) it will break’ and its coun-
 29600 terpart transitive *ca-nuu-qruu* ‘(I am afraid that) he will break it’, with the same
 29601 vocalism as that on the preverb *ta-* prefix on the Aorist *ta-ndo* ‘s/he took it’.

- 29602 (259) a. *kuuki χcyl pnu-cti tce, nuu fse laχtc^ha*
 DEM.PROX glass SENS-be LNK DEM be.like:FACT thing
 29603 *wi-ŋgu c^huu-tur-rke tce*
 3SG.POSS-inside IPFV:DOWNSTREAM-2-put.in[III] LNK

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- 29604 *cuu-Ngruu* *kua!*
 APPR-ACAUS:break SFP
- 29605 ‘This is (made of) glass, if you put it like that in something else, I am
 29606 afraid it will break.’ (elicited)
- 29607 b. *a-tcuu* *nua kua k^hutsa ta-ndo* *tce,*
 1SG.POSS-son DEM ERG bowl AOR:3→3'-take LNK
- 29608 *ca-nua-qruu* *kua!*
 APPR:3→3'-AUTO-break SFP
- 29609 ‘My son took the bowl, I am afraid that he will break it.’ (elicited)

29610 This alternation is also found on transitive verbs with dummy transitive sub-
 29611 ject (§14.3.5), as in (260), showing that morphological transitivity, rather than
 29612 semantic factors, determine the vocalism of this prefix.

- 29613 (260) *tua-muu* *ca-lxt* *kua*
 INDEF.POSS-weather APPR:3→3'-release SFP
- 29614 ‘I am afraid that it will rain.’ (elicited)

29615 In addition, like the Aorist, it occurs with the 1/2SG→3 -t (§21.1.3) as in (261a),
 29616 and selects Stem II (§12.2.1) in the verbs that have an alternation between stem I
 29617 and II, such as the verb *ti* ‘say’ in (261b) and *ce* ‘go’ in (261c).

- 29618 (261) a. *nua cuu-tua-nyma-t* *kua*
 DEM APPR-2-do-PST:TR SFP
- 29619 ‘I am afraid that you will do that.’ (elicited)
- 29620 b. *cuu-tua-tut* *kua*
 APPR-2-say[II] SFP
- 29621 ‘I am afraid that you will say it.’ (elicited)
- 29622 c. *cuu-a<nua>ri* *kua*
 APPR-<AUTO>go[II] SFP
- 29623 ‘I am afraid that he will go away.’ (elicited)

29624 Table 21.9 summarizes the morphological commonalities between Apprehen-
 29625 sive and Aorist (as opposed to Imperfective, §21.2.1).

29626 The Apprehensive is not only incompatible with all TAME markers, but also
 29627 with associated motion prefixes (§15.2.1) and non-finite verb forms. On the other
 29628 hand it appears with all person indexation markers (1sg in 263, 2sg in 262, 2sg→1sg
 29629 in 265) and the negative prefix *mu-* (262 and 264).

Table 21.9: Comparison of Apprehensive, Aorist and Imperfective forms

	Apprehensive	Aorist	Imperfective	Common feature
3SG→3'	çə-lət̪	pə-lət̪	pjuu-lət̪	a vocalism
3SG→3'	çə-nuu-qruu	pə-nuu-qruu	pjuu-nuu-qri	a vocalism
2SG→3	çuu-tuu-tut̪	tʂ-tuu-tut̪	tu-tuu-ti	Stem II
2SG→3	çuu-tuu-nyma-t̪	tʂ-tuu-nyma-t̪	tu-tuu-nyme	-t̪

- 29630 (262) [nزو stvþtsʰyt ci mii-cui-tuu-cʰa] jnuu-susam-a tce,
 2SG contest INDEF NEG-APPREHENSIVE-2-can SENS-think[III]-1SG LNK
 29631 nur jnuu-nuzdury-a wo
 DEM SENS-be.worried-1SG SFP
 29632 ‘I fear that you will not succeed in the contest, this is what I am worried
 29633 about.’ (2003sras, 95)

21.7.1.2 Functions

29635 The Apprehensive is used to indicate worry or even fear that the event referred
 29636 to by the verb might happen. Several verbs with the meaning ‘fear’ exist in the
 29637 language (in particular the Applicative verb *nuyymu* ‘be afraid of’, §17.4), but none
 29638 is a complement taking verb meaning ‘be afraid that *X*'.¹¹ The Rhetorical Inter-
 29639 rogative (§21.7.3) can have a meaning similar to that of the Apprehensive, but
 29640 conveying a milder degree of concern.

- 29641 (263) [cui-maqʰu-a kuu zo] jv-susso-nuu tce rcanui, pcozzi
 APPR-be.after-1SG SFP EMPH IFR-think LNK unexpectedly corner
 29642 kuβde zo jo-yi-nuu.
 four EMPH IFR-come-PL
 29643 ‘Fearing of being late (thinking ‘I am afraid that I will be late’), they
 29644 came from the four corners of the world.’ (150906 toutao, 19)

29645 The Apprehensive exclusively expresses the fear of the speaker, not that of the
 29646 agent, though in the case of reported speech this may be a person different from
 29647 the present speaker (as in 263).

¹¹The clause çuu-maqʰu-a kuu zo jv-susso-nuu in (263) creatively translates the Chinese expression 争先恐后 <zhēngxiānkǒnghòu> ‘vie with each other in order to’.

Despite its Aorist-like morphological features (§21.7.1.1), the Apprehensive is exclusively refers to fear for a future event at the time of utterance; for instance, (261c) above in cannot be interpreted as meaning ‘I am afraid that he may already be gone.’ In complement clause with a matrix verb in the Aorist, it can however refer to an event which has already happened ‘(I) was afraid that it might X’, as in (264).

- (264) *mui-cuu-k^buu kuu nui-suso-t-a*
 NEG-APPR-be.possible SFP AOR-think-PST:TR-1SG
 ‘I thought it would not work.’ (conversation, 02-05-2018; after opening a washing machine, expecting it would not open)

The apprehensive prefix only occurs either in independent clauses with the exclamative sentence final particle *kuu* (265), and in reported speech with the verb *suso* ‘think’ (264, 262, 263). It is strictly impossible in any other type of complement clause.

- (265) *cuu-kuu-mpca-a kuu!*
 APPREHENSIVE-2→1-scold-1SG SFP
 ‘I am afraid that you will scold me.’ (elicited)

It is possible to use the Apprehensive in clauses with precautioning or preventive meanings (as in 259 and 263), but it is not the usual way of expressing these meanings in the language (§25.5.6).

21.7.1.3 Historical origin

The Apprehensive *cuu-* is superficially similar to the translocative associated motion prefix *cuu-*, which is grammaticalized from the verb *ce* ‘go’ (§15.2.1.2), but the two prefixes do not occupy the same prefixal slot (-3 vs. -4, §11.2.1) and do not share the same morphological alternations, and are not semantically close. It is unlikely that they are historical related.

A possible origin for the apprehensive *cuu-* might be the alternative interrogative particle *ci* ‘whether ... or’ (§10.4.2), which can coordinate two clauses (the second clause being the negative counterpart of the first one) to express hesitation or worry that an action might not take place, as in (266) (see also 152, §21.4.3.2).

- 29677 (266) *c^ha-a ci my-c^ha-a my-xsi, pxjk^hu*
can:FACT-1SG QU NEG-can:FACT-1SG NEG-GENR:know:FACT still
29678 *x^hci-a cti*
be.small:FACT-1SG be.AFF:FACT
29679 ‘I don’t know whether I will be able to do it, I am still young.’ (2010-09,
29680 105-106)

29681 Although generally clause-final, the particle *ci* can be prosodically attached to
29682 the second clause, and could have been absorbed into the verbal template (Lai
29683 accepted describes similar processes in Khroskyabs). In this hypothesis, the Ap-
29684 prehensive was first grammaticalized in negative forms, with reordering of the
29685 Apprehensive and of the Negative prefix (267), and the non-negative Apprehen-
29686 sive forms were created by backformation.

- 29687 (267) *ci my-c^ha* \Rightarrow **cuu-my-c^ha* \Rightarrow *muu-cuu-c^ha*
‘(I don’t know) whether he (will be able to do it) or not be able to do it’ \Rightarrow
29689 ‘I worry that he might not be able to do it.’

29690 This idea should still be viewed as speculative, since it does not account for
29691 the Aorist-like morphological features of the Apprehensive.

29692 The *a* vocalism of the Apprehensive prefix with 3→3' transitive forms is a clue
29693 that the C-type preverbs in Japhug originate from the fusion of A-type preverbs
29694 with an Aorist 3→3' **a* prefix (§15.1.1.3). Given the ability of the Aorist to refer
29695 to future events in temporal clauses (§21.5.1.4), it is possible that in pre-Japhug
29696 or proto-Gyalrong, there was a TAME category without preverb but taking stem
29697 II and the 3→3' **a* prefix expressing perfective future tense, and that the gram-
29698 maticalization of *ci* as a prefix occurred on a form of this lost category.

29699 21.7.2 Probabilitative

29700 The Probabilitative prefix *umy-*, located in slot -6 of the outer prefical template
29701 (§11.2.1), is transparently grammaticalized from the combination of the Interrog-
29702 ative *w-* (§21.7.4) with the negative *my-* (§13.1.1). It is compatible with the Aorist
29703 (268), the Imperfective (§21.7.2.2) and the Factual Non-Past (269), and has the
29704 epistemic modality meaning ‘probably, presumably’.

- 29705 (268) *umy-jy-azyut*
PROB-AOR-arrive
29706 ‘He probably has already arrived.’ (elicited)

- 29707 (269) *tci-lab numuu, tci-tab umyx-pe*
 1DU.POSS-MZ DEM 1DU.POSS-on PROB-be.good:FACT
 29708 ‘(Now that we have money), maybe our stepmother will treat us better’
 29709 (140507 tangguowu-zh, 155)

29710 Although Probabilitative with Aorist (268) can be elicited, no such example
 29711 is attested in the corpus. Instead, a periphrastic construction with the Factual
 29712 Probabilitative form of the copula *umyx-ŋu* ‘maybe it is’ combined with the Aorist
 29713 is found, as in (270).

- 29714 (270) *ny-ja ndzi-cki ty-tut-a ri,*
 2SG.POSS-sister 3DU.POSS-DAT AOR:3→3'-say[II]-1SG LNK
 29715 *muu-ta-tut-ndzi umyx-ŋu ma*
 NEG-AOR:3→3'-say[II]-DU PROB-be:FACT SFP
 29716 ‘I have told it to your two elder sisters, but they presumably have not
 29717 told (your parents) about it (since they have not given any answer).’
 29718 (2014-kWLAG, 106)

29719 When the speaker hesitates in his degree of confidence regarding a particular
 29720 statement, s/he can alternate between the Factual copula *ŋu* and the Probabilita-
 29721 tive form *umyx-ŋu* ‘maybe it is’, as in (271).

- 29722 (271) *cyr tce tu-mbri tce, “qaqaqaqa” tu-ti ŋu tce numuu*
 night LOC IPFV-cry LNK INTERJ IPFV-say be:FACT LNK DEM
 29723 *pyyŋlaš ŋu. “pyyŋlaš ŋu” tu-ti-nuu, ŋu tce*
 pheasant be:FACT pheasant be:FACT IPFV-say-PL be:FACT LNK
 29724 *umyx-ŋu ma my-xsi matci cyr ndyre*
 PROB-be:FACT LNK NEG-GENR:know:FACT LNK night LOC
 29725 *múuj-sx-mto tce.*
 NEG:SENS-PROP-see LNK
 29726 ‘It sings at night, it makes the sound *qaqaqaqa*, that is the pheasant
 29727 *Pucrasia macrollopha*. They say it is the *Pucrasia macrollopha*, maybe it is,
 29728 we don’t know, in the night it is not visible.’ (23-pGAYaR, 8-11)

29729 The Probabilitative prefix is not compatible with negative prefixes or negative
 29730 copulas: forms such as †*umyx-maš* (intended meaning ‘maybe it is not’) are incor-
 29731 rect. To express the meaning ‘maybe not X’, the Rhetorical Interrogative *uβrr-*
 29732 with peg circumfix occurs instead (§21.7.3.3).

29733 21.7.2.1 Possible modality with peg circumfix

29734 The Probabilitative prefix can be combined with the peg circumfix (§11.4), with
 29735 an epistemic modality of substantial doubt ‘maybe’, as in (272).

- 29736 (272) *pya ra kuu tu-ndza-nu uumy-kuu-ŋu-ci ma*
 bird PL ERG IPFV-eat-PL PROB-PEG-be-PEG LNK
 29737 ‘Maybe birds eat it.’ (17-thowum, 39)

29738 This form is compatible with verbs in the Sensory, as in (273); with the meaning
 29739 ‘it seems, it looks like’.

- 29740 (273) *alo t̪eu rgumba ci yŋzu uumy-kuu-ŋu-ci t̪ce*
 upstream LOC temple INDEF exist:SENS PROB-PEG-be-PEG LNK
 29741 ‘It looks like there is a temple up there.’ (2003 Kunbzang, 229)

29742 21.7.2.2 Probabilitative with Imperfective

29743 The combination of the Probabilitative prefix with the Imperfective form (§21.2)
 29744 expresses optative modality ‘if only...’, as in (274) and (275).

- 29745 (274) *uumy-c^hu-myči-a*
 PROB-IPFV-be.rich-1SG
 29746 ‘If only I could become rich!’ (elicited)

- 29747 (275) “*icq^ha rjylpu u-t̪eu nu uumy-pjuu-mtam-a*”
 the.aforementioned king 3SG.POSS-son DEM PROB-IPFV-see[III]-1SG
 29748 *ntsui nui-suisym pjy-ŋu.*
 always IPFV-think[III] IFR.IPFV-be
 29749 ‘She was thinking all the time: ‘If only I could see the prince!’ (150819
 29750 haidenver-zh, 154)

29751 This type of compound form is also attested however with the expected com-
 29752 positional meaning ‘it will probably be’, as in (276b).

- 29753 (276) a. “*nui-k^hi ye” ti q^he,*
 3PL.POSS-luck SFP say:FACT LNK
 29754 ‘She said: ‘They are so lucky.’ (to have so many cattle).’

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- 29755 b. “*tcizyy umy-pjui-ŋu ny ly-yi wo!” ntsu*
1DU:GEN PROB-IPFV-be ADD IMP:UPSTREAM-come always SFP
29756 *tu-ti pjui-ŋu pjui-ŋu.*
IPFV-say PST.IPFV-be SENS-be
29757 ‘He said each time: ‘Maybe (these cattle) will be ours, come.’ (2005
29758 Kunbzang, 193-195)

29759 21.7.3 Rhetorical interrogative

29760 21.7.3.1 Morphology

29761 The Rhetorical Interrogative prefix *wβry-*, located in slot -6 of the outer prefixal
29762 template (§11.2.1), mainly occurs with verbs in the Factual Non-Past (277) in the
29763 corpus, but forms with the Aorist (278) or the Imperfective are also attested. It is
29764 not compatible with negative prefixes.

- 29765 (277) *rcañuu mti pjuruu bja zo tyrymckʰo pjui-ŋu*
UNEXP:DEG turquoise coral completely EMPH floor PST.IPFV-be
29766 *pjui-ŋu. 'nuu a-mi pjui-te-a ri*
SENS-be DEM 1SG.POSS-foot IPFV:DOWN-put[III]-1SG LNK
29767 *wβry-sqlum ma' na-suso pjui-ŋu*
RH.Q-collapse:FACT SFP AOR:3→3'-think SENS-be
29768 ‘The floor was all tiled with and turquoise and coral. She thought ‘If I
29769 tread on it, it will not yield under my weight, will it?’ (2005 Kunbzang,
29770 221)

- 29771 (278) *turmukʰa ny nuu-βyo jy-azyut ny “joβ*
evening ADD 3PL.POSS-FB AOR-arrive ADD INTERJ
29772 *wβry-c-tx-tuu-tuit-nuu?” ti pjui-ŋu.*
RH.Q-TRAL-AOR-2-say[II]-PL say:FACT SENS-be
29773 ‘In the evening, their lama arrived and said: ‘You did not go and say *joβ*
29774 (to the girl), did you?’ (2003kandZislama, 22)

29775 21.7.3.2 Functions

29776 The Rhetorical Interrogative has two main functions, both in the form of negative
29777 rhetorical questions.

29778 First, it expresses concern on part of the speaker that the action described
29779 by the verb might happen (279) or might have already happened (278 above),

depending on the TAME category of the verb. In this function, it is frequently combined with the sentence final particle *ma* (§10.4.4) as in (277) and (279).

- (279) “*a-taš nuutcu, loŋbutč^{hi} nu uβry-yuu-rnguu ma*”
 1SG.POSS-on DEM:LOC elephant DEM RH.Q-CISL-lie.down:FACT SFP
nuu-susym tce, nuu ntsuu w-ky-nuzduiy jnuu-ŋu
 IPFV-think[III] LNK DEM always 3SG.POSS-OBJ:PCP-worry/about SENS-be
k^{hi}
 HEARSAY
 ‘(The marmot)_i thinks: ‘The elephant_j won’t come and sleep on my
 (hole), will it_j?’, this is what it_i worried about.’ (28-qapar, 48)

In this use, *uβry-* normally carries a negative presupposition ‘it will not X, will it?’. This negative meaning appears to be absent only in a handful of examples such as (280), where *uβry-* is found with the final particle *ye*: in another version of the story from which this example is taken, the corresponding quotation has the verb *yi* ‘come’ in affirmative form without the Rhetorical Interrogative, and instead the sentence final particle *t^hay* (see 48, §21.3.1.2).

- (280) *a-mu, juymuar tce k^hu uβry-yi ye!*
 1SG.POSS-mother this.evening LNK tiger RH.Q-come:FACT SFP
 ‘Mother, the tiger will come this evening (to eat us), isn’t?’ (X1-khu, 3)

In this function, the prefix *uβry-* has some overlap with the Apprehensive prefix *gu-* (§21.7.1.2), though the latter conveys a higher degree of worry.

Second, the Rhetorical Interrogative occurs in interrogative clauses expressing polite requests, as in (281).

- (281) *n^hki nuu-t^hpi uu-taš ky-rxt nuu*
 DEM:MEDIAL 2PL.POSS-staff 3SG.POSS-on OBJ:PCP-write DEM
uβry-kuu-z-nympo-a-nuu?
 RH.Q-2→1-CAUS-watch-1SG-PL
 ‘You wouldn’t show me what is written on that staff of yours, would
 you?’ (2003sras, 61)

This function is common in particular with the Rhetorical Interrogative form *uβry-jy* of the modal verb *jy* ‘be possible’ selecting a complement clause in the Imperfective, as in (282).¹²

¹²The noun *a-rzqβ* ‘my wives’ in (282) is an essive adjunct (§8.1.7).

- 29806 (282) *nauzo ra χsum nuu, [a-rzaβ c^hw-tuu-yi-nuu]*
 2PL PL three DEM 1SG.POSS-wife IPFV:DOWNSTREAM-2-come-PL
 29807 *wuβry-jy?*
 RH.Q-be.possible:FACT
 29808 ‘The three of you, would you come (to my palace and become) my
 29809 wives?’ (Norzang 2005, 399)

29810 The prefix *wuβry-* also occurs in polite inquiries about a person’s health, ex-
 29811 pressing sincere concern about a possible illness as in (283).

- 29812 (283) *ny-kuu-mŋym wuβry-ku-tu, ny-cq^he*
 2SG.POSS-SBJ:PCP-hurt RH.Q-PRS-exist 2SG.POSS-cough
 29813 *wuβry-ku-t^hw?*
 RH.Q-PRS-be.serious
 29814 ‘You don’t have any disease (these days), have you? Your cough is not
 29815 serious, is it?’ (conversation, 2016-03-20)

29816 A more marginal use of *wuβry-* is found in (284), where it appears on two
 29817 antonymic verbs linked by the adversative *ri* to express the meaning ‘if I don’t
 29818 X, at least I will not Y.’ In another version of the story from which (284) is taken,
 29819 the same meaning (285) is expressed by verbs in the negative Factual Non-Past
 29820 with the sentence final particle *t^haŋ* (§10.4.4).

- 29821 (284) *p^hyn wuβry-pjui-tu-a ri bdwuy nuu*
 be.efficient:FACT QU.R-IPFV-exist-1SG LNK harm:FACT DEM
 29822 *wuβry-pjui-tu-a tce tx-rca*
 QU.R-IPFV-exist-1SG LNK INDEF.POSS-together
 29823 *c^hwi-yi-a je*
 IPFV:DOWNSTREAM-come-1SG SFP
 29824 ‘Even if I am of no use at least I will not do any harm, let me come
 29825 along!’ (X1-tWJo, 43)
- 29826 (285) *azo c^hwi-yi-a je ma mx-p^han-a ny*
 1SG IPFV:DOWNSTREAM-come-1SG SFP LNK NEG:be.efficient:FACT-1SG ADD
 29827 *mx-bdwuy-a t^haŋ ny*
 NEG-harm:FACT-1SG SFP SFP
 29828 ‘Let me come along, (even) if I am of no use, I will not do any harm.’
 29829 (several occurrences)

29830 **21.7.3.3 Rhetorical Interrogative with peg circumfix**

29831 The combination of the Rhetorical Interrogative with the peg circumfix (§11.4)
 29832 is not compositional. Despite the absence of any negative prefix (§13.1), it is the
 29833 negative counterpart (in functional terms) of the Probabilitative prefix (§21.7.2),
 29834 expressing the meaning ‘it looks like/seems that *X* is/does not’, as in (286)¹³ and
 29835 (287).

- 29836 (286) *k^hro uβry-kui-pe-ci*
 much RH.Q-PEG-be.good:FACT-PEG
 29837 ‘(What you are proposing) does not look nice (fair).’ (140506 nongfu he
 29838 mogui-zh, 69)
- 29839 (287) *ułonbutø^hi nui, ur-rme ra uβry-kui-tu-ci*
 elephant DEM 3SG.POSS-hair PL RH.Q-PEG-exist:FACT-PEG
 29840 ‘The elephant, it seems that it does not have hair (on its body).’
 29841 (19-RloNbutChi, 9)

29842 **21.7.3.4 Historical origin**

29843 The prefix *uβry-* is probably related to the Tshobdun interrogative prefix *vré-* (Sun
 29844 & Blogros 2019: 397), though the two prefixes are not entirely similar: Tshobdun
 29845 *vré-* is monosyllabic, and the vowel *-e* (from earlier **a*) has not undergone reduc-
 29846 tion to *v* as could have been expected in the view of its Japhug cognate. The fact
 29847 that Japhug *uβry-* contains two syllables, and that it occurs in the left-most (-6)
 29848 slot of the verbal template suggests that it may have been grammaticalized relatively
 29849 recently in comparison with other elements of the prefixal chain. In view of the
 29850 formal differences between the two languages, one cannot exclude at this stage
 29851 the possibility of independent grammaticalization, though the source is unclear.

29852 Possible sources (from a formal point of view) could include the noun *u-βra*
 29853 ‘his share’ (cognate to Tshobdun *ó-vre*) or the adverbial noun *u-βra* ‘it is *X*’s turn
 29854 to...’ (§5.1.2.12). However, the semantic link between these meanings and that of
 29855 the Rhetorical Interrogative is unclear.

¹³In (286), *uβry-kui-pe-ci* translates Chinese 这好像不太好吧 <zhè hǎoxiàng bú tài hǎo ba> ‘This does not look good/nice’.

29856 21.7.4 Interrogative

29857 21.7.4.1 Morphology

29858 The Interrogative *w-*, found in slot -6 of the outer prefixal template (§11.2.1), is a
 29859 stress-attracting prefix (§11.2.3). When attached to a monosyllabic base, like the
 29860 Factual Non-Past 3SG of monosyllabic stem verbs, the stress is on the Interroga-
 29861 tive prefix itself, as in *ú-jy* ‘it is possible to’ (288) (see also 49, §21.3.1.3 above).

- 29862 (288) *kuki n̄w-tu-kʰym ú-jy*
 DEM.PROX IPFV-2-give[III] QU-be.possible:FACT
 29863 ‘Could you pass (me) this thing?’ (2003, conversation taRrdo)

29864 If the base is polysyllabic, the stress is on the second syllable just following
 29865 the Interrogative, whether this syllable is a prefix (289) or part of the verb stem
 29866 (290).

- 29867 (289) *nxj w-tú-suiz?*
 2SG QU-2-know:FACT
 29868 ‘Do you know it?’ (19-GzW, 8)
- 29869 (290) *ki sakab w-rkwa nutcu si w-yízu?*
 DEM.PROX well 3SG.POSS-side DEM:LOC tree QU-exist:SENS
 29870 ‘Are there trees near this well?’ (140517 mogui de jing-zh, 100)

29871 When occurring in direct contact with the stem of a contracting verb (§12.3),
 29872 the Interrogative *w-* does not merge with the initial *a-*. Instead, an epenthetic *-j-*
 29873 is inserted between the prefix and the verb stem (see examples 4, §12.3 and 23,
 29874 §18.1.3).

29875 21.7.4.2 Functions

29876 The Interrogative prefix *w-* has two main functions. First, it expresses a polar
 29877 question (as in 291a for instance), expecting an answer with the same verb in
 29878 affirmative or negative form (291b), a question studied in more detail in §21.1.4
 29879 and §21.3.3.2. An alternative way of marking polar questions is the sentence final
 29880 particle *ci* (§10.4.2).

- 29881 (291) a. *wortcʰi zo a-tx-tu-i-tʰe ú-jy?*
 please EMPH IRR-PFV-2-ask[III] QU-be.possible:FACT
 29882 ‘Can you ask it (for me)?’ (divination 2002, 45)

- 29883 b. *jyy*, *jyy!*
be.possible:FACT be.possible:FACT
29884 ‘Yes, yes!’ (divination 2002, 46)

29885 Second, it occurs in the protasis of conditionals (§25.2.1) in free variation with
29886 initial reduplication (§12.4.1.2). In this construction, the verb is generally followed
29887 by the additive marker *ny*, as in (292).¹⁴

- 29888 (292) “*ny-nmas nua a-tx-suisu*” *ui-pná-tur-susym ny, kuki*
2SG.POSS-husband DEM IRR-PFV-live QU-SENS-2-think[III] ADD DEM.PROX
29889 *tx-ndze*
IMP-eat[III]
29890 ‘If you want your husband to live, eat this!’ (150909 hua pi-zh, 182)

29891 21.7.4.3 Historical perspectives

29892 Many languages of the Trans-Himalayan family, including Chinese, Tibetan and
29893 Gyalrongic varieties, have vocalic prefixes marking polar interrogatives similar
29894 to Japhug *wu-* (Sun 1995). However, it remains unclear whether these prefixes
29895 reflect genuine common inheritance: in particular, although some Tibetan lan-
29896 guages do have an interrogative prefix *e-*, it is not attested in Old Tibetan texts
29897 (Hoshi 2012), and may therefore be an innovative feature. If this prefix is not
29898 an archaic feature in Tibetan, the Japhug Interrogative *wu-* and its equivalent in
29899 other Gyalrongic languages such as Khroskyabs *â-* (Lai 2017: 340) may be better
29900 analyzed as borrowings from Amdo Tibetan.

29901 21.8 Non-verbal TAME markers

29902 Verbal morphology and periphrastic constructions are not the only ways to en-
29903 code TAME in Japhug. Three other grammatical categories contribute to mark
29904 TAME.

29905 21.8.1 TAME adverbs

29906 Tense, aspect and modality can be expressed by primary aspectual adverbs such
29907 as *p̥yjku* ‘still’, *zuruuzyri* ‘progressively’ or *ntsuu* ‘always’ (§22.2.1), time ordinals
29908 (§7.5.2), temporal counted nouns (§7.5.1), time adverbs derived from nouns (§7.5.3)
29909 and adverb of epistemic modality (§22.2.5).

¹⁴The second person prefix *ny-* in (292) is a case of hybrid indirect speech (§24.2.5.2).

29910 21.8.2 Sentence-final particles

29911 Many sentence final particles contribute to the expression of modality and evi-
 29912 dentiality. Some particles are dedicated markers: the hearsay particle *kʰi* (§10.4.3)
 29913 is specifically encodes evidentiality, *tʰaq* indicates epistemic modality (§10.4.4)
 29914 and *je* has a hortative/imperative meaning (§10.4.1). Other particles such as *wo*
 29915 (§10.4.1) have meanings that are more difficult to describe exclusively in terms of
 29916 modality or evidentiality. No sentence final particle expresses tense or aspect.

29917 21.8.3 Nouns and the expression of modality

29918 Two nouns of Tibetan origin, *w-mdor* ‘colour’ and *smulym* ‘prayer’ occur sentence-
 29919 finally as modal markers. These sentence-final uses probably originate from complement-
 29920 taking nouns (§5.1.2.6) used predicatively (§22.3).

29921 21.8.3.1 The noun *w-mdor* ‘colour’

29922 The noun *w-mdor* ‘colour’, borrowed from Tibetan ཡོག་ ‘colour’, occurs with
 29923 the highly grammaticalized modal meaning ‘it looks like’, as in (293) and (294).

- 29924 (293) [w-myljab nuu, [...] kurcyl-dza jamar yyzu] w-mdor
 3SG.POSS-limb DEM eight-piece about exist:SENS 3SG.POSS-colour
 29925 ‘It looks like (the spider) has eight limbs.’ (26-mYaRmtsaR-48)

- 29926 (294) [icqʰa nuu [kyntcʰw-sŋi zo tu-ndza-nuu]
 the.aforementioned DEM several-day EMPH IPFV-eat-PL
 29927 nuu-rtas] w-mdor
 SENS-be.enough 3SG.POSS-colour
 29928 ‘It looks like (the meat in one of those) is enough (for the lions) to eat for
 29929 several days.’ (20-sWNgi, 58)

29930 This construction occurs with the Sensory in the complement clause (§21.3.2)
 29931 as in the examples above, or with the Inferential to express a past event/situation
 29932 (see 22, §11.6.2). The combination of Inferential with *w-mdor* is semantically close
 29933 to the Probabilitative with peg circumfix (§21.7.2.1, see also 15d, §11.4).

29934 The denominal verb *numdor* ‘look like’ derived from this construction (§20.7.1)
 29935 has the same meaning, but rather selects a subject participle in the complement
 29936 clause as in (295), with subject coreference between the main clause and the
 29937 complement (compare 295 and 296).

- 29938 (295) *χpum kui-ts^bu nui maka mui-pui-muummu tce ku-nui-rvzi*
 monk SBJ:PCP-be.fat DEM at.all NEG-IPFV-move LNK IPFV-AUTO-stay
 29939 *pjy-cti ma [kui-ce] mui-pjy-numdor.*
 IFR.IPFV-be.AFF LNK SBJ:PCP-go NEG-IFR.IPFV-look.like
 29940 ‘The fat monk was not moving and was staying, and did not look like he
 29941 was going (anywhere).’ (150830 san ge heshang-zh, 127)
- 29942 (296) *[kui-ce] nui-tui-numdor*
 SBJ:PCP-go SENS-2-look.like
 29943 ‘You look like you are going.’ (elicited)

29944 The verb *numdor* can alternatively take a noun phrase as semi-object, as in
 29945 (297).

- 29946 (297) *[tuirme kui-pe ci] nui-numdor*
 person SBJ:PCP-be.good INDEF SENS-look.like
 29947 ‘He looks like someone nice.’ (elicited)

21.8.3.2 The noun *smulym* ‘prayer’

29949 The noun *smulym* ‘prayer’ (སྒྱନྤ ལମ ། ‘*smon.lam* ‘prayer’, ‘wish’) is grammaticalized as
 29950 a quasi-sentence final particle, used in combination with the Irrealis (§21.4.1.2)
 29951 to express a wish, as in (298). A similar construction has been documented in
 29952 Tshobdun (Sun 2007b).

- 29953 (298) *tc^heme kui-mpciu~mpcyr nry-cya*
 girl SBJ:PCP-EMPH~be.beautiful 2SG.POSS-tooth/age
 29954 *kui-xtciu~xtci zo, tuirme ntsui tu-ndze*
 SBJ:PCP-EMPH~be.small EMPH people always 2-eat[III]:FACT
 29955 *my-kui-ra ci a-nui-tui-yβzu smulym*
 NEG-SBJ:PCP-be.needed INDEF IRR-PFV-2-become prayer
 29956 ‘May you become a very beautiful, nice and young girl who does not
 29957 have to eat humans.’ (Norbzang 2012, 328-329)

29958 It also occurs with the Factual Non-Past (299), and can have scope over several
 29959 clauses, comprising both verbs in the Factual Non-Past and the Irrealis, as in
 29960 (300).

- 29961 (299) *nui ty-nui-ndym tce tui-myci smulym*
 DEM IMP-AUTO-take[III] LNK 2-be.rich:FACT prayer
 29962 ‘Take (these cattle and, and may you be rich!)’ (2003kAndzwsqhaj2, 142)

- 29963 (300) *nauzora kumv tur-scit-nu* *tce nu, nau-kur-mjym* *ra*
 2PL also 2-be.happy:FACT LNK DEM 2PL.POSS-SBJ:PCP-hurt PL
 29964 *a-pur-me* *smulym ny!*
 IRR-IPFV-not.exist prayer SFP
 29965 ‘May you be happy and be spared of any disease.’ (conversation,
 29966 15-01-02)

29967 The basic meaning of *smulym* is still attested in Japhug, as in (301), and its
 29968 sentence-final function is performative, and particularly common in formal prayers
 29969 and wishes.

- 29970 (301) *smulym nu na-ndun-nu* *ndyre, “ki* *wi-byri* *nu*
 29971 prayer DEM AOR:3→3'-read-PL LNK DEM.PROX 3SG.POSS-before DEM
sustab zo kui-yc^huic^ha, *ki* *wi-byri* *nu sustab*
 29972 COMP EMPH SBJ:PCP-be.capable DEM.PROX 3SG.POSS-before DEM COMP
zo kui-pe [...] *a-nu-a-βze* *smulym*”
 29973 EMPH SBJ:PCP-be.good IRR-PFV-make[III] prayer
ta-tut-nu
 29974 AOR:3→3'-say[II]-PL
 29975 ‘They recited the prayer, and said ‘May you become even stronger and
 better than before.’ (Norbzang 2005, 410-412)

29976 The noun *smulym* can be denominalized with the prefix *nu-* (§20.7.2) as the
 29977 transitive complement-taking verb *nusmulym* ‘wish’, which is compatible with
 29978 either infinitival complements or complement clauses in the Irrealis as in (302).

- 29979 (302) *nyzo a-t^hu-tui-myci* *nu-nu-smulam-a*
 29980 2SG IRR-PFV-2-be.rich SENS-DENOM-prayer-1SG
 ‘I wish that you become rich.’ (elicited)

29981 22 Simple clauses

29982 This chapter focuses on the syntax of simple clauses, that is clauses which do not
29983 involve multiclausal constructions.

29984 Five topics are discussed: word order within the clause (§22.1), sentential ad-
29985 verbs (§22.2), verbless sentences (§22.3), noun-verb collocations (§22.4) and cop-
29986 ulas (§22.5).

29987 22.1 Word order

29988 With a few exceptions (§22.3), Japhug sentences require a finite verb to be com-
29989 plete, while all other constituents are optional. The main verb is generally sentence-
29990 final: only a handful of words (§22.2.7) and dislocated constituents (§22.1.3), can
29991 occur after it.

29992 22.1.1 Basic word order

29993 This section describes the word order patterns involving verb and core argu-
29994 ments attested in the corpus (with the exception of right dislocation, §22.1.3)
29995 when all arguments are overt. The question of non-overt arguments is treated in
29996 §22.1.2, and the position of adverbials in §22.2.

29997 22.1.1.1 Intransitive verbs

29998 When overt, core arguments and adjuncts are located before the verb. In (1) for in-
29999 stance, the intransitive subject *wi-mu wi-wa ni* 'his mother and his father' (§9.2.2.2)
30000 in the dual is placed before the adverb *բայն* 'both' and the main verb *յր-si-ndzi*
30001 'they_{du} died'. The dual suffix on the verb here indexes the number of the intransi-
30002 tive subject (§14.2.1.2).

- 30003 (1) [wi-mu wi-wa ni] բայն յր-si-ndzi
3SG.POSS-mother 3SG.POSS-father du both IFR-die-DU
30004 'His parents had both died.' (150828 donglang, 8)

30005 In the case of semi-transitive verbs (§14.2.3), which have two absolute arguments, it is very rare to have both an overt intransitive subject and an overt
 30006 semi-object (except if the semi-object is a complement clause, see §24.3.2). The
 30007 semi-object can be follow (2) or precede (3) the subject, but in the second case
 30008 there is a pause, indicative of left dislocation.
 30009

- 30010 (2) *kukura <xuexiao> nui-rga-nuu.*
 DEM.PROX:PL school SENS-like-PL
 30011 ‘Those (the children) like school.’ (conversation, 14-05-10)

- 30012 (3) *tyci nuu, pya ra nuist^{hi} my-rga-nuu.*
 barley DEM bird PL that.much NEG-like:FACT-PL
 30013 ‘The barley, the birds don’t like it so much.’ (23-pGAYaR, 29)

30014 With intransitive verbs selecting a locative phrase (§14.2.4), the locative phrase
 30015 is generally located between the intransitive subject and the verb (4).

- 30016 (4) *[u-pi ni] tsu kui-wxti nutcu jo-ce-ndzi*
 3SG.POSS-elder.sibling DU road SBJ:PCP-be.big DEM:LOC IFR-go-DU
 30017 ‘His two elder brothers went (along) the big road.’ (2003qachga, 45)

30018 However, it is possible to put the locative phrase before the subject, especially
 30019 when it refers to the source of the motion (§15.1.2.1), as in (5) and (6).

- 30020 (5) *tumunymk^{ha} nutcu [qro χsum] pjui-yi-nuu*
 heaven DEM:LOC pigeon three IPFV:DOWN-come-PL
 30021 ‘(Every day), three pigeon came down from heaven.’ (02-deluge, 49)
- 30022 (6) *mts^hu yuu u-ηgwu nutcu [mts^hoblanj] to-nui-tob*
 lake GEN 3SG.POSS-in DEM:LOC water.monster IFR-AUTO-come.out
 30023 ‘A water monster came out of the lake.’ (2011-04-smanmi, 257)

30024 Likewise, the standard of comparison (marked by the postposition *səz*, §8.2.7)
 30025 can either precede or follow the intransitive subject (§26.2.1).

30026 Oblique phrases with the relator noun *u-tax* ‘on, above’ selected by the main
 30027 verb (§8.3.4.3) are located between the intransitive subject and the verb, as in (7)
 30028 and (8).¹

¹With the motion verb *ce* ‘go’, in (8) in stem II *ari*, *u-tax* specifically indicates the means of transportation (§8.3.4.3).

- 30029 (7) [u-yli nui] li ty-ryku u-tas wuma zo
3SG.POSS-dung DEM again INDEF.POSS-crop 3SG.POSS-on really EMPH

30030 pe
be.good:FACT

30031 'Its dung is good (as fertilizer) for the crops.' (05-qaZo, 95)

- 30032 (8) tcendyre [zyni pya ni] zmbriu u-tas ky-ari-ndzi nui-nu.
lnk 3DU bird DU boat 3SG.POSS-on AOR:EAST-go[II] SENS-be
30033 'The two of them (including the bird) departed on the boat.' (Norbzang
30034 2005, 231)

30035 Unlike intransitive subjects, essive adjuncts (§8.1.7) are closer to the verb than
30036 oblique arguments, as shown by *turme* 'person' in (9), which is not an intransitive
30037 subject ('the people are nice to me') but an essive phrase 'as people' (see also 18,
30038 §8.1.7).

- 30039 (9) tce <zhoujikong> tce myzuu li a-tas turme
LNK center.for.disease.control LNK even.more again 1SG.POSS-on person
30040 pe-nui ma
be.good:FACT-PL LNK
30041 'At the district center for disease control, they are also very nice to me (as
30042 people).' (140501 tshering skyid, 141)

30043 22.1.1.2 Monotransitive verbs

30044 When the main verb is transitive, the transitive subject (with the ergative post-
30045 position, §8.2.2.1) is found before the direct object (in absolute form, §8.1.3), as
30046 in (10).

- 30047 (10) kuu-yyrbaa nura kuu qarts^haz u-puu nui pjy-mto-nui
SBJ:PCP-hunt DEM:PL ERG deer 3SG.POSS-little DEM IFR-see-PL
30048 'The hunters saw the little deer.' (140429 jiedi-zh, 133)

30049 The object of a transitive verb only rarely precedes the subject, except for
30050 object complement clauses (§24.3.1), and examples exhibiting this order are all
30051 analyzable as left-dislocated topicalized constituents, as in (11).

22 Simple clauses

- 30052 (11) *a-tcuu, ji-rya ra nuu-mbala kuu*
 1SG.POSS-son 1PL.POSS-neighbour PL 3PL.POSS-OX ERG
 30053 *t^ha-nutsum tce numu u-kuu-car*
 AOR:3→3-AUTO-take.away LNK DEM 3SG.POSS-SBJ:PCP-search
 30054 *ce-tci*
 go:FACT-1DU
 30055 ‘My son_i, the neighbour’s ox has taken him_i away, and we are looking for
 30056 him_i.’ (tWJo 2012, 42)

30057 In (12), the object *u-mp^huz numu* is topicalized, and in addition the ergative
 30058 phrase *txjpyom kuu* is not a real agent.

- 30059 (12) *u-mp^huz numu txjpyom kuu pjy-ndo*
 3SG.POSS-bottom DEM ice ERG IFR-take
 30060 ‘His (the leopard’s) bottom, it had been caught in the ice.’ (140427 qala, 37)

30061 The object-subject-verb order is however found to focalize the subject, to-
 30062 gether with a postverbal copula (§22.5.3.2) as in (13), where the transitive subject
 30063 *numu kuu* follows the object (Chunjie).

- 30064 (13) <chunjie> *nuunu kuu ja-nur-tsum* *ju t^haŋ*
 ANTHR DEM ERG AOR:3→3'-VERT-take.away be:FACT SFP
 30065 ‘It is probably him who took away Chunjie.’ (150825 huluwa-zh, 118)

30066 Note that without intonation, (13) is ambiguous, as [<chunjie> *nuunu kuu*] could
 30067 also be analyzed as a single constituent (since personal names can optionally
 30068 take demonstrative determiners, §5.3.4), and in this case the translation of the
 30069 sentence would be ‘Chunjie probably took him.’ The above translation however
 30070 is the correct one in the context of the story.

30071 22.1.1.3 Secundative verbs

30072 The recipient (direct object) generally precedes the theme (semi-object) of se-
 30073 cundative verbs (§14.4.2) as in (14).

- 30074 (14) *u-zi tuumgo ny-mbi*
 3SG.POSS-younger.sibling food IFR-give
 30075 ‘He gave food to his younger brother.’ (nyima 2003-2, 31)

30076 In noun-verbs collocations where the verb is secundative such as *tuu-nuu+jts^hi*
 30077 ‘breastfeed’ as in (15), placing the recipient (*u-puu*) after the them (*tuu-nuu*) is never
 30078 attested.

- 30079 (15) *wu-puu tur-nuu juu-jts^{hi} kumy zo*
 3SG.POSS-young INDEF.POSS-breast IPFV-give.to.drink also EMPH
 30080 ‘Even when (the monkey mother) breastfeeds her young one,...’ (19-GzW,
 30081 25)

30082 However, with the verb *mbi* ‘give’ there are examples of the opposite order as
 30083 in (16), where the theme (*qajyi ky-kui-cke nura* ‘pieces of bread that had burnt’)
 30084 precedes the recipient (*kui-lyy nuu* ‘the shepherd’).

- 30085 (16) *tc^heme nuu kur qajyi ky-kui-cke nura kui-lyy nuu*
 30086 girl DEM ERG bread AOR-SBJ:PCP-burn DEM:pl SBJ:PCP-herd DEM
 30087 *na-mbi*
 30088 AOR:3→3'-give
 ‘The girl gave the shepherd pieces of bread that had burnt (to eat).’ (2003
 Kunbzang, 76)

30089 22.1.1.4 Causative verbs

30090 Causative verbs (§17.2) derived from plain intransitive verbs behave like mono-
 30091 transitive verbs (§22.1.1.2), but those derived from transitive (§14.4.3) or semi-
 30092 transitive (§14.4.4) verbs are ditransitive.

30093 Causative derivations from transitive verbs have a causee (§8.2.2.6), whose
 30094 syntactic status is intermediate between subject and object: it can be marked with
 30095 the ergative, but is indexed as if it were an object if it is first or second person
 30096 while the object is third person (§14.4.3). The causee in the ergative is normally
 30097 placed before the object (17), even when it serves as instrument (§17.2.5.8) as in
 30098 (18).

- 30099 (17) *wu-mbro kur qapri tuu-rdob nuu pjy-z-rytcaab*
 30100 3SG.POSS-horse ERG snake one-piece DEM IFR-CAUS-trample
 ‘He made his horse trample one of the (two) snakes.’ (smanmi 2003, 30)
- 30101 (18) “*zmbruu-βjaj nuunu kur cʰa nuu tú-wy-sui-cmi tce cʰa*
 30102 boat-oar DEM ERG alcohol DEM IPFV-INV-CAUS-mix LNK alcohol
mum” tu-ti-nuu puu-ŋu ma
 30103 be.tasty:FACT IPFV-say-PL PST.IPFV-be LNK
 ‘People used to say that if one mixes the alcohol (using) a boat oar, it is
 30104 tasty.’ (31-cha, 43-44)

30105 The object can be located before the causee, but it is always a left dislocated
 30106 constituent, followed by a pause as *wu-cnvz nuunu* ‘its head/extremity’ in (19).

- 30107 (19) *qandze yuu, (...) u-cnyz numuu, u-mtc^{hi} kuu*
 earthworm GEN 3SG.POSS-extremity DEM 3SG.POSS-mouth ERG
 30108 *ku-su-nnym tce*
 IPFV-CAUS-take[III] LNK
 30109 ‘(The earthworm’s head) extremity, (the crow) takes it with its beak.’
 30110 (140511 qajdo, 3)

30111 In the case of causative verbs from semi-transitive verbs (§14.4.4), such as *syrmi*
 30112 ‘give a name’ (from *rmi* ‘be called’, §17.2.2.7), the direct object (the person to whom
 30113 a name is given) is always located before the semi-object (the name given), as in
 30114 (20).

- 30115 (20) *tce ndzi-tcui nuu nimawozyr to-syrmii-nuu*
 LNK 3DU.POSS-SON DEM ANTHR IFR-give.a.name-PL
 30116 ‘They called their son Nyima ’Odzer.’ (2011-05-nyima, 3)

30117 22.1.1.5 Indirective verbs

30118 Dative arguments (§8.3.1) of indirective verbs (§14.4.1) follow the transitive sub-
 30119 ject as in (21):² there is not a single example of dative phrase preceding a transi-
 30120 tive subject in the whole corpus.

- 30121 (21) *icq^{ha} nuunu ty-tcui nuu kuu [u-mu*
 the.aforementioned DEM INDEF.POSS-son DEM ERG 3SG.POSS-mother
 30122 *nuu u-cki] (...) to-ti.*
 DEM 3SG.POSS-DAT IFR-say
 30123 ‘The boy said to his mother (...).’ (2014-kWLAG, 437)

30124 Dative phrases can be located either after the theme or before it, as shown
 30125 by examples (22a) and (22b) redundantly describing the same action in the same
 30126 story.

- 30127 (22) a. <*alading*> *nuu kuu, nykinuu, icq^{ha} tytsu nuu*
 ANTHR DEM ERG FILLER the.aforementioned lamp DEM
 30128 *[u-mu u-cki] ny-k^ho tce,*
 3SG.POSS-mother 3SG.POSS-DAT IFR-give LNK
 30129 ‘Aladin gave the lamp to his mother.’ (140511 alading-zh, 165)

²For reason of place, the theme (the reported speech clause) is not reproduced here and simply indicated by (...), but corresponds to example (173 in §21.5.1.4).

- 30130 b. [u-mu u-cki] txtsu nuu pñ-k^ho.
 3SG.POSS-mother 3SG.POSS-DAT lamp DEM IFR-give
 30131 'He gave his mother the lamp.' (140511 alading-zh, 167)

30132 The first pattern (object-dative) is rarer than the second one, but attested for
 30133 all indirective verbs, including verbs of speech, as in (23), where the reported
 30134 speech clause occurs before the dative phrase (compare with 21 above, the more
 30135 common pattern).

- 30136 (23) [nuu-kuu-lyy lu-ce-a uu-pñú-pe
 2DU.POSS-SBJ:PCP-herd IPFV:UPSTREAM-go-1SG QU-SENS-be.good
 30137 a-tx-tui-ti ra] kuu-wxti ni ndzi-p^he ti
 IRR-PFV-2-say be.needed:FACT SBJ:PCP-be.big DU 3DU-DAT say:FACT
 30138 puu-ŋu
 SENS-be
 30139 'He told the two elder (sisters) 'Ask (your parents) whether it would be
 30140 appropriate for me to go herding (cattle) for you.' (2003 Kunbzang, 68)

30141 Most oblique arguments also follow the subject and precede the object. It is
 30142 the case of the goal argument marked by the relator *uu-tax* (§8.3.4.3) in (24).

- 30143 (24) kuu-yyrbaš kuu [pri uu-tax] tudi to-lyt
 SBJ:PCP-hunt ERG bear 3SG.POSS-on arrow IFR-release
 30144 'The hunter shot an arrow at the bear.' (elicited)

30145 22.1.2 Overt and non-overt arguments

30146 Sentences with two or three overt arguments such as those discussed in §22.1.1
 30147 are a minority in Japhug. Most clauses comprise a verb with only one, or even
 30148 without any overt arguments.

30149 22.1.2.1 Core arguments

30150 Non-overt core arguments, including subjects and objects, are always definite,
 30151 and anaphorically refer to a previously mentioned entity. For instance, example
 30152 (25) with a bare verb necessarily means 'S/he/it ate it', and cannot be interpreted
 30153 as 'S/he/it ate/had a meal' with indefinite object or as 'someone ate it' with
 30154 indefinite subject.

30155 (25) *ta-ndza*

AOR:3→3'-eat

30156 'S/he/it ate it.' (elicited)

30157 To express indefinite core arguments, non-overtness is an option only in the
 30158 case of labile verbs (§14.5.1), but requires the conversion of the verb to the intransitive
 30159 conjugation. Only a handful of verbs are labile (§14.5.1.1, §14.5.1.2), and for
 30160 the rest of the verbs either an indefinite pronoun (§6.6) or a valency-decreasing
 30161 derivation such as antipassive (§18.6), passive (§18.1) or proprietive (§18.8) must
 30162 be used instead.

30163 Semi-objects (§8.1.5), like objects, are interpreted as definite where non-overt,
 30164 as shown by (26) with the semi-transitive verb *βjrt* 'get, obtain' (§14.2.3, §19.7.3).

30165 (26) *tc^hemṛpuu nuu kuu jn̥-wY-nuisuak^ho tce muu-pjy-βjrt.*

girl DEM ERG IFR-INV-rob LNK NEG-IFR-obtain

30166 'The girl had robbed him_i of it_j, he_i had not obtained it_j.' (150829 taishan
 30167 zhi zhu-zh, 134)

30168 22.1.2.2 Oblique arguments

30169 Unlike core arguments, oblique arguments can be interpreted as indefinite when
 30170 non-overt. For instance, when motion verbs like *ce* 'go' and *yi* 'come' (§15.1.2.1),
 30171 lack both an overt goal and a purposive clause (§24.4.2.1), two different meanings
 30172 are possible. First, a previously mentioned goal can be understood as implicit as
 30173 in (27).

30174 (27) *qapri tu-ce ri múa-j-c^ha tce*

snake IPFV:UP-go also NEG:SENS-can LNK

30175 'Snakes cannot go (up there in the chimney) either.' (22-kumpGatCW, 70)

30176 Second, there is a minority³ of cases when no definite goal can be semantically
 30177 recoverable, as in (28) where the two verbs *ku-ce* and *jnu-yi* indicate back and forth
 30178 distributed motion, without any clear direction.

³However, when the motion verb takes a supine purposive clause, the goal is very frequently non-overt and indefinite, as can be observed in the majority of the examples in §24.4.2.1.

- 30179 (28) *wu-zda* *pnu-car* *pnu-susym tce tcendyre, ki*
 3SG.POSS-companion IPFV-search SENS-think LNK LNK DEM
 30180 *kui-fse* *ku-ce* *n̥ pnu-yi*
 INF:STAT-be.like IPFV:EAST-go ADD IPFV:west-come
 30181 (That ant) want to search for its companion, and goes here and fro like
 30182 that.' (conversation 140501-01)

Likewise, when the oblique argument of indirective verbs (§14.4.1, §22.1.1.5) is non-overt, it can be interpreted as either definite or indefinite.

For instance, the indirective collocation *tudi+lxt* ‘shoot an arrow’, which selects an oblique argument (goal) in *wu-tar* (§8.3.4.3, see 24 above in §22.1.1.5), lacks an overt oblique in (29). In this example, it is clear that the subject must have aimed before shooting, and therefore that a covert definite oblique is implied, as confirmed by the choice of a specific orientation ‘towards east’ rather than the indefinite orientation preverb.

- 30191 (29) *nunua xpum nui kui tudi ci ko-lxt* *tcendyre icq^ha,*
 DEM monk DEM ERG arrow INDEF IFR:EAST-release LNK FILLER
 30192 *qapri nui yui wu-rpas zo to-xtswy*
 snake DEM GEN 3SG.POSS-shoulder EMPH IFR-hit
 30193 ‘The monk shot an arrow, and it hit the snake in the shoulder.’ (150820
 30194 qaprANar, 23)

By contrast, in (30), also without overt goal, the command is to shoot arrows without aiming, simply to see whose arrows will reach the farthest, as confirmed by the choice of the indefinite orientation preverb. The absence of relator nominal clause in *wu-tar* in this example is to be interpreted here as absence of goal.

- 30199 (30) *tudi jy-lxt-nui*
 arrow IMP-release-PL
 30200 ‘Shoot arrows!’ (elicited, based on a story)

In (31), the verb of speech *ti* ‘say’ lacks an overt dative argument (§8.3.1), and it is obvious in this context not only that there is no definite addressee, but that there is no addressee at all, since *ti* here means ‘utter (a sound)’.

- 30204 (31) *wu-tui-muictaw zo pjy-ŋu ri, pŋ-nycqa q^he,*
 3SG.POSS-NMLZ:DEG-be.cold EMPH IFR.IPFV-be LNK IFR-endure LNK
 30205 “*utč^hutč^hwi*” *mu-to-ti*
 INTERJ NEG-IFR-say
 30206 ‘Although it was very cold, he (successfully) endured it, and did not say
 30207 ‘How cold!’’ (07-deluge, 73-74)

22 Simple clauses

30208 To force a definite goal/addressee interpretation, the presence of an overt re-
30209 lator noun with a 3SG prefix is necessary, as in (32).

- 30210 (32) a. **ui-tax** *tudi to-lxt*
30211 3SG.POSS-on arrow IFR-release
30212 'S/he shot at it.' (elicited)
30213 b. **ui-cki** (...) *to-ti*
30214 3SG.POSS-DAT reported.speech IFR-say
30215 'S/he told (...) to him/her.' (many examples)

30216 The difference between core vs. oblique arguments is therefore distinct from
30217 the parameter of indexability (§14.2, §14.3): core arguments are those with oblig-
30218 atory definite interpretation when non-overt, including (transitive and intransi-
30219 tive) subjects, objects and semi-objects, while oblique arguments lack this prop-
30220 erty.

30219 22.1.2.3 Focalization

30220 Focalized noun phrases are always overt, if limited to a demonstrative pronoun.
30221 They can be formally indistinguishable from non-focalized ones even by intona-
30222 tion, as the demonstrative *nui* in the last clause of example (33).

- 30223 (33) *mt^humyr yuu ui-zbroj nunuu, tu-nui-to^b nui-ηu.*
30224 seal GEN 3SG.POSS-pattern DEM IPFV:UP-AUTO-come.out SENS-be
30225 *tu-mymbaur kui-fse nui-ηu tce nui*
30226 IPFV-be.protuberant SBJ:PCP-be.like SENS-be LNK DEM
30227 *my-naχtcury.*
30228 NEG-be.the.same:FACT
30229 'The patterns on the seals (called *mt^humyr*) are coming out, protuberant,
30230 that is how they differ (from the other types of seals).' (160706 thotsi, 67)

30231 Focalized first or second person referents require an overt pronoun to surface,
30232 as in (34).

- 30233 (34) *nyzo ny-sni nui-pas ma azo a-sni*
30234 2SG 2SG.POSS-heart SENS-be.black LNK 1SG 1SG.POSS-heart
30235 *múj-pas tce, t^hndzi wuma nui nyzo nui-tui-ηu ma azo*
30236 NEG:SENS-be.black LNK demon real DEM 2SG SENS-2-be LNK 1SG
30237 *t^hndzi nui-mas-a*
30238 demon SENS-not.be-1SG
30239 'You are evil, not me, you are the real demon, not me.' (2002 lhandzi, 12)

30234 There is no dearth of strategies to explicitly mark focus, including focus parti-
 30235 cles (§9.1.6), pseudo-cleft constructions (§23.6.1) and sentence-final copulas (§22.5.3.2).

30236 22.1.3 Right dislocation

30237 While word order is rigid in Japhug, and the verb is normally located after all
 30238 arguments and adjuncts (§22.1.1), left and right dislocation is attested, though
 30239 accompanied with a specific intonation.

30240 22.1.3.1 Dislocated constituents

30241 All arguments and adjuncts can be right dislocated, including transitive subjects
 30242 with ergative marking (35), possessor with genitive (§36), locative and time ad-
 30243 juncts (§37).

- 30244 (35) *sla tu-ngo nyu tu-ti-nu* *nyu, kurua ra ku.*
 moon IPFV-be.sick be:FACT IPFV-say-PL be:FACT Tibetan PL ERG
 30245 ‘They say that moon is getting sick, the Tibetans.’ (29-mWBZi, 151)

- 30246 (36) *nui ma u-muunto* *ky-mto mane, turgi yu.*
 DEM apart.from 3SG.POSS-flower INF-see not.exist:SENS fir GEN
 30247 ‘Apart from that it has no flowers, the fir.’ (08-tWrgi, 73)

30248 Sentential adverbs (§22.2) also undergo dislocation, as shown by (37) and (38).

- 30249 (37) *paxci ndyre pjy-tu, kua-*
*cu-**ngua*
 apples ADVERS IFR.IPFV-exist former.times
 30250 ‘(Unlike other fruits,) apples did exist (in our area), in former times.’
 30251 (07-paXCi, 4)

- 30252 (38) *clas zo ny-me, li.*
 IDPH(I):immediately EMPH IFR-not.exist again
 30253 ‘She suddenly disappeared, again.’ (150907 niexiaoqian-zh, 116)

30254 Subordinate clauses can also be right-dislocated, for instance infinite comple-
 30255 ment clauses (example 42, §24.3), supine participial clauses (39) (§24.4.2.1) or con-
 30256 cessive conditionals (40) (§25.2.3.1).

- 30257 (39) *tcuxtsi ky-ari-j, kua-**nympo*
 Cogtse AOR:EAST-go[II]-1SG SBJ:PCP-watch
 30258 ‘We went to Cogtse, to do some sightseeing.’ (conversation, 2013)

- 30259 (40) *tu-mbri u-k^buak^ha ur-bar nuu ki ntsur*
- IPFV-make.noise 3SG.POSS-while 3SG.POSS-wing DEM DEM.PROX always
- 30260 *tu-ste juu-ŋu, ly-zo kuuny.*
- IPFV-do.like[III] SENS-be AOR-land also
- 30261 ‘It does like this with its wings when it sings, even when it lands.’
- 30262 (23-RmWrcWftsa, 114)

30263 In (41), the consequence clause *bmurtsu nu srre* ‘The *Berchemia yunnanensis* is

30264 funny’ is right-dislocated together with the linker *ma* (here meaning ‘because’),

30265 while the causal clause (§25.5.2) serves as the main clause. This example provides

30266 evidence that the linker *ma* can form a syntactic constituent with the preceding

30267 clause, even though it is most often prosodically linked to the causal clause fol-

30268 lowing it.

- 30269 (41) *yuijpa kuu-fse naure ri tce u-muantov juu-lxt,*
- this.year SBJ:PCP-be.like DEM:LOC LOC LNK 3SG.POSS-flower IPFV-release
- 30270 *fsaq^he tce tce u-mat juu-βze ju,*
- next.year LOC LNK 3SG.POSS-fruit IPFV-grow[III] be:FACT
- 30271 ***bmurtsu*** ***nuu srre*** ***ma.***
- Berchemia.yunnanensis DEM be.funny:FACT LNK
- 30272 ‘The *Berchemia yunnanensis* is funny because it makes a flowers (there)
- 30273 this year, but its fruits grow the next year.’ (11-qarGW, 59)

30274 The presence of a right dislocated constituent does not preclude an overt con-

30275 stituent with the same syntactic function in the main clause: for instance, in (42)

30276 the ergative phrase *tx-wa nu ku* ‘the father’ and the right-dislocated constituent

30277 *u-nmas nu ku* ‘her husband’ refer to the same person, transitive subject of the

30278 sentence.

- 30279 (42) *uzo sruumw kuu-ŋu nuu tx-wa nuu kuu mupjy-suχsy,*
- 3SG râkshasî SBJ:PCP-be DEM INF-father DEM ERG NEG-IFR-realize
- 30280 ***u-nmas*** ***nuu kuu.***
- 3SG.POSS-husband DEM ERG
- 30281 ‘The father_i did not realize that she_j was a râkshasî, her_j husband_i.’
- 30282 (28-smAnmi, 62)

30283 22.1.3.2 The functions of right dislocation

30284 Right dislocation in Japhug has three main functions, similar to those identified

30285 by Honkasalo (2019: §13.7.2) in the Geshiza language.

30286 The main function of right dislocation is that of afterthought, used to identify
 30287 a referent that has no been mentioned previously (35), provide additional side
 30288 comments (38, 41), complementary information (37) or even redundant information
 30289 that can contribute to identify a referent (42).

30290 Right dislocation is also used to reactivate a constituent in discourse (Honkasalo
 30291 2019: §13.7.2), to avoid ambiguity with other referents. In (43) for instance, the ref-
 30292 erent *u-kʰa* ‘its house/shell’ is found more than twenty clauses after its previous
 30293 occurrence.

30294 (43) *tce numu nua-rko, u-kʰa nua.*

LNK DEM SENS-be.hard 3SG.POSS-house DEM

30295 ‘It is hard, its house (the shell of the snail).’ (26-tWcipaR, 76)

30296 Finally, right dislocation can serve to mark emphasis on a topical referent. In
 30297 (44) for instance, the noun *u-mṛlyjas* is both left- and right-dislocated, showing
 30298 that this instance is neither an afterthought nor a constituent reactivation.

30299 (44) *u-mṛlyjas nua, numu, kurc-y-ldzi jamar yṣzu rca,*
 30300 3SG.POSS-limb DEM DEM six-piece about exist:SENS UNEXP:FOC

u-mṛlyjas nua.

3SG.POSS-limb DEM

30301 ‘Its limbs, it has six ones, its limbs.’ (26-mYaRmtsaR, 47)

30302 In some cases, the exact function of right dislocation is ambiguous. In (39) for
 30303 instance, the purposive phrase could be emphasized by dislocation, but alterna-
 30304 tively it is also possible to interpret it as an afterthought.

30305 22.2 Sentential adverbs

30306 This section describes non-derived sentential adverbs, excluding those derived
 30307 from nouns (§5.8), lexicalized conversbs (§16.6) ideophones (§10.1), but including
 30308 adverbs with non-synchronously transparent etymology and loanwords from Ti-
 30309 betan.

30310 22.2.1 Tense and aspect

30311 Absolute tense is mainly expressed by time ordinals (§7.5.2) and other time adver-
 30312 bials derived from nouns (§7.5.3). There are in addition a few aspectual adverbs
 30313 that are not transparently derived from nouns.

30314 The adverb *pṣjkʰu* has a permansive meaning ‘still’ when used with a positive
 30315 verb form (45).

- 30316 (45) *izo a-mu nuu t^hamt^ham kurcysqaptuy t^hur-azyut ny.*
 1PL 1SG.POSS-mother DEM now eighty.one AOR-arrive be:FACT
 30317 *p_yjk^hu ji-pas pjuu-nge c^ha.*
 still 1PL.POSS-pig IPFV-feed[III] can:FACT
 30318 ‘Our mother is now eighty-one years old, she can still feed our pigs.’
 30319 (2010, 9.2, 16-17)

30320 Contrary to what could have been expected, *p_yjk^hu* ‘still’ is only rarely used
 30321 with a verb prefixed with the Autive in permansive function (§19.1.5). Examples
 30322 like (46) with redundant marking of permansive aspect are attested but uncom-
 30323 mon.

- 30324 (46) *mts^hoblay nuunu p_yjk^hu maka zo pjy-n-nuuzu β*
 water.monster DEM still completely EMPH IPFV.IFR-AUTO-sleep
 30325 *cti ma*
 be.AFF:FACT LNK
 30326 ‘The aquatic monster was still asleep.’ (140508 benling gaoqiang de si
 30327 xiongdi-zh, 189)

30328 With a negative predicate, *p_yjk^hu* means ‘not...yet’, as shown by (47) and (48).

- 30329 (47) *azo p_yjk^hu tua-sla mui-puu-tsu-a*
 1SG still one-month NEG-PST.IPFV-pass-1SG
 30330 ‘It has not yet been a month since I have (come here).’ (2003 tWxtsa, 44)
 30331 (48) *ma uu-me kuni ynysqamnuz-pyrme t^hur-azyut, tce*
 LNK 3SG.POSS-daughter also twenty.eight.years.old AOR-arrive LNK
 30332 *nuunu p_yjk^hu uu- χ ti ra mui-na-car ma*
 DEM yet 3SG.POSS-companion PL NEG-AOR:3→3'-search LNK
 30333 ‘His daughter is twenty.years years old, but she does not yet have a
 30334 companion (husband).’ (14-siblings, 317-218)

30335 This adverb is generally located before the object (examples 45, 48) but after
 30336 the intransitive subject (46, 47). It can also occur without a main verb, in combi-
 30337 nation with the sentence final particle *je* (§10.4.1) as *p_yjk^hu je* ‘wait’, hence
 30338 the interjection *p_yk^hije* ‘wait!’ (§10.2.1) with irregular fusion.

30339 The reduplicated forms *zuruzzri* ‘progressively’ and the rarer *zvrzur*,⁴ are fre-
 30340 quent with gradable stative verbs to express a progressive change of state as in
 30341 (49), sometimes with incremental initial reduplication of the verb (§12.4.1.4).

⁴It is possible that these forms are borrowed from *zor* ‘incidentally’, though the semantics is unclear.

- 30342 (49) *zuruaz̥ri tce tce cʰur-yurni ḷu.*
 progressively LNK LNK IPFV-be.red be:FACT
 30343 ‘It progressively becomes red.’ (11-qarGW, 66)

30344 They are also found with dynamic verbs, in particular with temporal clauses
 30345 in *u-juja* ‘along with’ (§25.3.4.2) as in (50).

- 30346 (50) *tce tʰui-wxti u-juja nɣ, (...) kui-wxti ra kui*
 Lnk AOR-be.big 3SG.POSS-along ADD SBJ:PCP-be.big PL ERG
 30347 *nui-ky-ndza, tcʰi tu-ndza-nui kui-ŋu nui zuruaz̥ri tce*
 3PL.POSS-OBJ:PCP-eat what IPFV-eat-PL SBJ:PCP-be DEM progressively LNK
 30348 *nui-mbi-nui.*
 IPFV-give-PL
 30349 ‘As the child_i grows older, the adults_i progressively give (him/her)_j their_i
 30350 food, whatever it is they_i eat.’ (140426 tApAtso kAnWBdaR, 38)

30351 The highly polyfunctional *ci*, whose functions range from the numeral ‘one’
 30352 (§7.1.1) to various indefinite, partitive or non-identity markers (§6.6.1, §6.8, §6.7.2,
 30353 §9.1.4.1, §9.1.7), is used as an aspectual adverb ‘once’ as in (51) (see also for instance
 30354 141, §22.4.2.5).⁵ The attenuative adverb *ci* presumably derives from this meaning
 30355 (§22.2.4).⁶

- 30356 (51) “*qʰihihī*” *ci ta-tut nui-ŋu*
 INTERJ once AOR:3→3'-say[II] SENS-be
 30357 ‘He said *qʰihihī*.’ (2003 qachGa, 160)

30358 Its reduplicated form *ci ci* has the meaning ‘sometimes, in some cases’, often re-
 30359 peated in two or more clauses in parataxis ‘sometimes X, sometimes Y’ as in (52).⁷
 30360 In (52), *ci ci* combines with the Autive prefix in spontaneous function (§19.1.4) to
 30361 indicate the unpredictability of the alternative events.

- 30362 (52) *u-me múaŋ-nuaβdaŋ qʰe tcendyrre u-me*
 3SG.POSS-daughter NEG:SENS-take.care LNK LNK 3SG.POSS-daughter
 30363 *nui, nskinui, ci ci pjui-nui-mtsui, ci ci pjui-nui-fka*
 DEM FILLER one one IPFV-AUTO-be.hungry one one IPFV-AUTO-be.full
 30364 ‘He did not take care of his daughter, and his daughter would sometimes
 30365 be hungry, sometimes have enough to eat.’ (17-lhzazron, 69-70)

⁵Semelfactive meaning is however more often expressed with a sentential counted noun (§7.3.2.5) with the ‘one’ prefix (for instance *tu-yim* ‘one time’).

⁶Chinese 一下 <yíxià> ‘one time, a little’ has a similar range of meanings.

⁷See also 167 (§21.5.1.2) and 9 (§25.1.6) for representative examples of this adverbial locution.

22 Simple clauses

30366 The adverb *li* means ‘again, like the previous time’ as in (53). It can be option-
 30367 ally followed by the additive *ny*.

- 30368 (53) *tcendyre li to-jyvt tce, smvnimmitob kucana c^ho li*
 LNK again IFR:UP-turn.around LNK ANTHR ANTHR COMIT again
 30369 *pjx-ruk^hycxl-ndzi.*
 IFR-discuss-DU
 30370 ‘He returned again (up there), and had again a discussion with Smanmi
 30371 Metog Koshana (as he had done previously).’ (28-smAnmi, 197)

30372 In combination with the adverbial *ci*, it can mean ‘one more, another one’ as
 30373 in (54) (like Chinese 再 <zài> ‘again’). Alternatively however, *ci* in context can
 30374 also be interpreted as an attenuative adverb (§22.2.4).

- 30375 (54) *ama u-tui-mpcyr nui! li ci puu-fext!*
 INTERJ 3SG.POSS-NMLZ:DEG-be.beautiful SFP again once IMP-tell
 30376 ‘Wow, what a beautiful (story)! Tell (me) another one.’ (2005 tWJo, 40)

30377 The adverb *ntsui* ‘always’ is used as a temporal universal quantifier ‘all the time’
 30378 (55) or ‘every time’ as in (56), a function from which it has become a distributive
 30379 quantifier (§9.1.3.3). It is one of the few adverbs that can be used postverbally
 30380 (§22.2.7).

- 30381 (55) *u-skvt mpcyr ma “qusput qusput” ntsui tu-ti*
 3SG.POSS-voice be.beautiful:FACT LNK onomatopoeia always IPFV-say
 30382 *ŋu.*
 SENS-be
 30383 ‘(The cuckoo) has a beautiful song, it says *qusput qusput* all the time.’
 30384 (24-qro, 68)

- 30385 (56) *spikuku zo nuu ntsui tu-ti puu-ŋu tce,*
 every.day EMPH DEM always IPFV-say SENS-be LNK
 30386 ‘(The bird comes) everyday and says this every time.’ (2014-kWLAG, 510)

30387 In addition, *ntsui* can indicate a repeated action ‘again and again’ as in (57),
 30388 where the repetition is also marked by the additive *ny* (§8.2.6).

- 30389 (57) *“wortc^hi ny wojyr, ma-ty-kui-ndza-a” ntsui to-ti puu-ŋu.*
 please ADD please NEG-IMP-2→1-eat-1SG always IFR-say SENS-be
 30390 ‘He said again and again ‘Please, don’t eat me.’’ (140427 bianfu yu
 30391 huangshulang-zh, 11)

30392 Other temporal adverbs include *blywur* ‘suddenly’ from Tibetan གླྷྲྷྰ ‘*glo.bur*’⁸
 30393 ‘sudden’, used with Aorist or Inferential verb forms to express an abrupt change
 30394 of state (58), *tozde* ‘a moment’, which can also mean ‘suddenly’ (example 197,
 30395 §21.5.2.2), and also ‘in a moment’ referring to a future event (131, §21.4.2.2) or
 30396 ‘for a moment’ (59), and *içq'a* ‘just now’⁸ (on which see also §9.1.5.2).

- 30397 (58) *maka psh-nxvaæ-i, blywur zo tu-xtu*
 completely PST.IPFV-have.a.good.time-1PL suddenly EMPH 3SG.POSS-belly
 30398 *tx-mŋym tce pu-si cti*
 AOR-hurt LNK AOR-die be.AFF:FACT
 30399 ‘As we were having a party (in the mountain), his belly suddenly started
 30400 to ache, and he died.’ (Norbzang 2012, 368)

- 30401 (59) *kure ri tozde ku-nuna-a.*
 DEM.PROX:LOC LOC a.moment PRS-rest-1SG
 30402 ‘I am resting for a moment.’ (conversation 2019-09-16)

30403 22.2.2 Quantification

30404 This section presents adverbial quantifiers that are not temporal or aspectual
 30405 markers, as those are treated in the previous section (§22.2.1).

30406 22.2.2.1 Universal quantifiers

30407 The universal quantifiers *krysufse* ‘all’ and *lonba* ‘all’ can have scope over a single
 30408 noun phrase (§9.1.3.1). When following an intransitive subject or object in pre-
 30409 verbal position as in (60), it is not clear whether the scope of the quantifier is on
 30410 the preceding noun phrase or on the whole sentence.

- 30411 (60) *rgytpu rgynmuu ni kui [kuiki tx-pvtsø xsuwm ki]*
 old.man old.woman DU ERG DEM.PROX INDEF.POSS-child three DEM.PROX
 30412 *krysufse zo cʰy-y-wxti-ndzi.*
 all EMPH IFR-CAUS-be.big-DU
 30413 ‘The old man and the old woman raised all these three children.’ (140514
 30414 huishuohua de niao-zh, 60)

30415 The postnominal *mutç'imiruz* ‘all kinds’ (§9.1.3.5) appears in (61) stranded
 30416 from the noun *tu-ŋga* ‘clothes’ by the unexpected/high degree marker *rca* (§26.1.1.4),
 30417 suggesting that it could be analyzed here as a sentential adverb.

⁸Its meaning is close to Chinese 刚才 <gāngcái> ‘just now, a moment ago’.

22 Simple clauses

- 30418 (61) *tua-ŋga rca mutc^himuraz c^hú-wy-βzu*
 INDEF.POSS-clothes UNEXP:FOC all.kinds IPFV-INV-make
 30419 *k^huu*
 be.possible:FACT
 30420 ‘One can make all kinds of clothes (using it).’ (05-qaZo, 72)

30421 22.2.2.2 Everywhere

30422 The adverb *a拜ndundyt* ‘everywhere’ can be used on its own, but also together
 30423 with overt locative adjuncts (or goals); it can both precede (63) or follow it (62,
 30424 64).

- 30425 (62) *tur-ji u-ŋgur a拜ndundyt zo tu-łor*
 INDEF.POSS-field 3SG.POSS-in everywhere EMPH IPFV-come.out
 30426 *cti.*
 be.AFF:FACT
 30427 ‘It grows everywhere in the fields.’ (12-ndZiNgri., 159)

30428 Locative adjuncts used with *a拜ndundyt* often take the plural *ra* (§9.1.1.2) to
 30429 mark approximate location as in (63) and (64).

- 30430 (63) *a拜ndundyt sunguu ra kumy tu-łor cti.*
 everywhere forest PL also IPFV-come.out be.AFF:FACT
 30431 ‘It also grows everywhere in the forest.’ (14-sWNgWJu, 147)
- 30432 (64) *a拜ndundyt zo k^ha ra c^hui-rypuu. tui-ji u-ŋgur ra*
 everywhere EMPH house PL IPFV-litter INDEF.POSS-field 3SG-inside PL
 30433 *c^hui-rypuu*
 IPFV-litter
 30434 ‘Mice have litter everywhere in the house, in the fields.’ (27-spjaNkW, 166)

30435 There are a few examples where *a拜ndundyt* is followed by the locative post-
 30436 position *ri* (§8.2.4.1) as (65) like a locative noun phrase. However, no sentences
 30437 with *a拜ndundyt* ‘everywhere’ as core argument (like ‘everywhere is quiet’) are
 30438 found in the corpus, indicating that it would be clumsy to analyze it as a pronoun
 30439 (§6.7.1).

- 30440 (65) *ntufse zo a拜ndundyt ri tu-nnui-łor q^he, u-zrym*
 like.that EMPH everywhere LOC IPFV-AUTO-come.out LNK 3SG.POSS-root
 30441 *nura kui-tu maye.*
 DEM:PL SBJ:PCP-exist not.exist:SENS
 30442 ‘It grows simply like that everywhere, it has no roots.’ (20-sWrna, 76)

30443 When *a拜ndundyst* ‘everywhere’ occurs under the scope of negation, it never
 30444 expresses the meaning ‘nowhere’, as shown by (66) and (67).

30445 (66) *stymku nura, tui-ci u-rkui nura tu ma*
 plain DEM:PL INDEF.POSS-water 3SG.POSS-side DEM:PL exist:FACT LNK

30446 *a拜ndundyst st^huci me*
 everywhere so.much not.exist:FACT

30447 ‘It is found in plains, or next to rivers, but it is not found everywhere.’

30448 (14-sWNgWJu, 53)

30449 (67) *tce cyr tce c^hu-nui-łob-nui tce, a拜ndundyst*
 LNK night LNK IPFV:DOWNSTREAM-AUTO-come.out-PL LNK everywhere

30450 *ju-ce-nui my-kui-k^hu*
 IPFV-go-PL NEG-SBJ:PCP-be.POSSIBLE

30451 ‘(They make it) to prevent (animals) from coming out at night and going
 30452 everywhere.’ (150902 mkhoN, 21)

30453 The word *ŋotçujondyst* ‘everywhere’ is semantically very close to *a拜ndundyst*
 30454 ‘everywhere’ but rarer; it may also be translated as ‘in all kinds of places’. It
 30455 contains a partially reduplicated form of the interrogative pronoun *ŋotçu* ‘where’
 30456 (§6.5.4).

30457 (68) *ckryz u-ŋgwu tci pui-łob, turgi u-ŋgwu tci*
 oak 3SG.POSS-inside also SENS-come.out fir 3SG.POSS-inside also

30458 *pui-łob, zmbri u-ŋgwu tci pui-łob, mbraj*
 SENS-come.out willow 3SG.POSS-inside also SENS-come.out red.birch

30459 *u-ŋgwu tci pui-łob, tce syjku sunġwui nura tci*
 3SG.POSS-inside also SENS-come.out LNK birch forest DEM:PL also

30460 *pui-łob, tce ŋotçujondyst zo yżzu cti ri, stymku*
 SENS-come.out LNK everywhere EMPH exist:SENS be:AFF LNK plain

30461 *me, sunġwui bja zo tu-łob pui-ŋu.*
 whether forest completely EMPh IPFV-come.out SENS-be

30462 ‘(This mushroom) grows among oaks, among firs, among willows, among
 30463 red or white birch forests, you find it everywhere, whether on plains or
 30464 in forest.’ (23-mbrAZim, 233-238)

30465 22.2.2.3 Restrictive ‘only, always’

30466 The adverb *bja* ‘completely’, which can be used to mark restrictive focus on a
 30467 noun phrase (§9.1.6.5), also occurs with scope over the whole sentence in the

30468 meaning ‘all, only, always’ as in (69), where it follows the ergative *ku* (compare
 30469 with 148 in §9.1.6.5, where the ergative is located before *ɛja*).

- 30470 (69) *tui-ŋga* *me,* *tui-xtsa* *me* *nua*
 INDEF.POSS-clothes whether INDEF.POSS-shoe whether DEM
 30471 *tr-tcui* *ra ku* *ɛja* *zo* *cʰui-tʂauβ-nua* *pjy-ŋu.*
 INDEF.POSS-son PL ERG completely EMPH IPFV-SEW-PL IFR.IPFV-be
 30472 ‘Whether clothes or shoes, it was always the boys (not the ladies) who
 30473 sewed them.’ (12-kAtsxWb, 120)

30474 In copular sentences (§22.5.1.1), when *ɛja* has scope over the nominal predicate,
 30475 that nominal predicate can be preposed, as in (69) (see also example 277 in
 30476 §21.7.3.2).⁹

- 30477 (70) *kucəunŋgu* *tce* [*tr-tcui* *ɛja* *zo]* *kui-ry-tʂauβ*
 in.former.times LNK INDEF.POSS-son completely EMPH SBJ:PCP-APASS-sew
 30478 *pjy-cti* *ma* *tcʰeme* *kui-ry-tʂauβ* *pjy-me.*
 IFR.IPFV-be.AFF LNK girl SBJ:PCP-APASS-sew IFR.IPFV-not.exist
 30479 ‘In former times, only boys were tailors (all tailors were boys), there were
 30480 no women tailors.’ (12-kAtsxWb, 115)

30481 22.2.2.4 Restrictive ‘alone’

30482 To express the meaning ‘alone’, two constructions based on the root *-sti* ‘alone’
 30483 are used.

30484 The root *-sti* can be directly combined with personal pronouns in forms such
 30485 as *azo-sti* with the 1SG *azo* ‘I’ or *uzo-sti* with the 3SG *uzo* ‘he’ (§6.1.2) as in (71).

- 30486 (71) *nx-rca* *tu-yi-a* *ra* *ma* *kutcu azo-sti*
 1SG.POSS-together IPFV:UP-come-1SG be.needed:FACT LNK here 1SG-alone
 30487 *kui-ryzi-a* *múj-cʰa-a*
 IPFV-stay-1SG NEG:SENS-can-1SG
 30488 ‘I am coming with you, I cannot stay here all alone.’ (2-deluge2012, 80)

30489 Alternatively, the reduplicated form of the root *stusti* ‘alone’ occurs either on
 30490 its own as in (72), or as a postnominal modifier as in (73).

⁹Example 167 in §9.1.8.2 is superficially similar, but the constituent [noun+*ɛja zo*] in that example is a prenominal modifier of the following noun, while in (70) *tr-tcui ɛja zo* cannot be a prenominal modifier of *kui-ry-tʂauβ* ‘tailor’, otherwise the existential verb *pjy-tu* rather than the copula *pjy-cti* would be expected.

- 30491 (72) *az̥o stu̥sti ñu-a*
 1SG alone be:FACT-1SG
 'I am alone.' (conversation, 2014)
- 30493 (73) *fsapañ k̥y-χsu mūij-mbat ma maka aki pr̥yku rgali*
 cattle INF-raise NEG:SENS-easy LNK completely down ANTHR milk.cow
 30494 *stu̥sti kui zo, ji-tuñþyi lonba zo, nuñ kui~kui-jndz̥yz*
 alone ERG EMPH 1PL.POSS-chaff all EMPH DEM TOTAL~SBJ:PCP-be.coarse
 30495 *zo t̥a-ckut q̥e*
 EMPH AOR:3→3'-eat.completely LNK
 'Raising cattle is difficult, down there in Praku, the milk cow alone ate all
 30497 our chaff, all the big ones.' (taRrdo2003, 35)

30498 In a text translated from Chinese, we do find a calque of the Chinese construc-
 30499 tion (我一个人 <wǒ yīgèrén> 'I alone') with the pronoun *az̥o* '1SG' followed by
 30500 the counted noun *tui-rdor* 'one piece' (§7.3.2.4); this sentence is not idiomatic.

- 30501 (74) *az̥o tui-rdor kui ntsuñ tui-ci c-tu-re-a*
 1SG one-piece ERG always INDEF.POSS-water TRAL-IPFV:UP-fetch[III]-1SG
 30502 'It is always I alone who goes to fetch water.' (150830 san ge heshang, 44)

30503 22.2.3 Identity

30504 The adverb *anamana* 'identical' is borrowed from the Amdo Tibetan form རྒྱା.ନା.ମା.ନା 'identical'. It occur with the copula *ñu* (§22.5.1.1) as in (75). It is
 30505 similar in meaning to the reduplicated participle *kui-naχt̥cuñ~χt̥cuñ* 'completely
 30506 identical' of *naχt̥cuñ* 'be the same' (§9.1.7) but does not occur as noun modifier.
 30507

- 30508 (75) *wi-þri rcanuñ, qacpa wi-þri nuñ anamana zo*
 3SG.POSS-body UNEXP:FOC frog 3SG.POSS-body DEM identical EMPH
 30509 *nuñ-ñu*
 SENS-be
 30510 'The body of the (turtle) is identical to the body of a frog.'(140510 wugui,
 30511 8)

30512 22.2.4 Adverbial Intensifiers

30513 Intensifiers used to express high degree ('much') and quantity ('much, for a long
 30514 time') are discussed in §26.1.1. Negative intensifiers are discussed in §13.4.3.

The attenuative *ci*, derived from the adverbial function ‘once’ (§22.2.1) of the numeral ‘one’ (§7.1.1), conveys a milder and more polite tone to Imperative (§21.4.2) and Irrealis (§21.4.1) verb forms, in particular with modal verbs in interrogative form (§24.5.3.1) as in (76).

- (76) *wort^čhi zo, azo a-βi ci a-pui-mtam-a*
 please EMPH 1SG 1SG.POSS-younger.sibling a.little IRR-PFV-see[III]-1SG
úu-jyγ
QU-be.allowed:FACT
 ‘Could I see my younger sister, please?’ (140511 1001 yinzi-zh, 23)

Due to the high polyfunctionality of *ci*, in examples such as (77), the attenuative function is not always clearly distinguishably from its semelfactive one.

- (77) *li ci tvi-ti*
 again a.little.once IMP-say
 'Say it again!' (many attestations)

The intensifier *koyla*, whose first syllable originates from the reduction of the lexicalized participle *ku-ju* ‘the one that/who is (really)’ (Table 16.2, §16.1.1.7),¹⁰ originally means ‘really’, a meaning still attested in (78). In this meaning it can also serve as prenominal modifier (§9.1.8.2).

- (78) *wo a-mu, azo koŋla jx-azyut-a*
INTERJ 1SG.POSS-mother 1SG really AOR-arrive-1SG
‘Mother, it is really me who arrived (not someone else pretending to be me.)’ (Norbzang 2012, 220)

The secondary meanings ‘(doing) well, correctly’ (79) and ‘completely’ (80) developed out of the etymological sense of ‘really’.

- (79) *ma konla mu-ky-rto-a ri, u-mvlyjab nura pnu-dyn,*
 LNK really NEG-AOR-look-1SG LNK 3SG.POSS-limb DEM:PL SENS-be.many
 ‘I did not have a good look at (how many limbs it has), but it has many
 limbs.’ (21-mdzadi

¹⁰The non-reduced form of *koyla*, *kuyjula*, corresponds to Tshobdun *kəŋólp* ‘well’ (Sun & Blogros 2019: 55).

- 30538 (80) *kupa w-skyt ri w-qiu jamar ma*
 Chinese 3SG.POSS-language also 3SG.POSS-half about apart.from
 30539 *múj-tso-nui. (...) li nu koŋla*
 NEG:SENS-understand-PL again DEM completely
 30540 *múj-tso-nui.*
 NEG:SENS-understand-PL
 'Chinese_i also, they only understand half, (...), they don't understand it_i completely/well (so one has to learn to speak their language to be able to communicate).' (150901 tshuBdWnskAt, 14-17)

30544 Finally, in some negative contexts, *koŋla* acquired a meaning close to *maka*
 30545 '(not) ... at all', as in (81).

- 30546 (81) *tce ky-ymui-tuy ri pu-me ma <jiatong>*
 LNK INF-RECIP-meet also PST.IPFV-not.exist LNK completely
 30547 *koŋla pu-me tce (...) ky-ŋke ㅂja zo*
 transportation PST.IPFV-not.exist LNK INF-walk completely EMPH
 30548 *ju-kui-ce pu-ra.*
 IPFV-GENR:S/O-go PST.IPFV-be.needed
 30549 'We had no opportunity to meet, as there were no transportation means
 30550 at all, (...) and we had no choice but to go on foot (whenever there was a
 30551 meeting).' (12-BzaNsa, 21)

30552 22.2.5 Epistemic modality

30553 The adverbs *cʰyl̥nn̥y* 'maybe' and *zgruy* 'certainly' can contribute to the expression
 30554 of epistemic modality, together with verbal morphology (§21.4, §21.7) and
 30555 sentence final particles (§10.4).

30556 The former *cʰyl̥nn̥y* 'maybe', 'perhaps' originates from an Inferential form of
 30557 the verb *l̥t* 'release', followed by the additive *n̥y*, perhaps originally the protasis
 30558 of a conditional construction (§25.2.1). It is often combined with the sentence final
 30559 particle *tʰan̥* (§10.4.4) as in (82), or with a verb in Probabilative form (§21.7.2).

- 30560 (82) *izora nyki, cʰyl̥nn̥y yuu-znužduuxpa-j tce yuu-lxt-i*
 1PL FILLER maybe INV-have.mercy:FACT-1PL LNK INV-release:FACT-1PL
 30561 *tʰan̥ wo*
 SFP SFP
 30562 'Maybe (the ogre) will have mercy upon us and will let us go.' (160703
 30563 poucet3, 39)

22 Simple clauses

30564 The latter *zgruy* ‘certainly’ generally occurs with a main verb in the Factual
 30565 Non-Past (§21.3.1). It tends to be replaced by the Chinese adverb 肯定 <kědìng>
 30566 ‘certainly’, even by the best speakers.

- 30567 (83) *n̩-wi n̩ui zgruy zo rga*
 2SG.POSS-grand.mother DEM certainly EMPH like:FACT
 30568 ‘Your grandmother will certainly like it.’ (140428 xiaohongmao-zh, 52)

30569 22.2.6 Orientation adverbs

30570 The tridimensional system found in orientation preverbs (§15.1.1.1), egressive post-
 30571 positions (§8.2.10, Table 8.1) and locative relator nouns (§8.3.4.1) is also reflect
 30572 by locative adverbs (Table 22.1). There is a one-to-one correspondence between
 30573 these adverbs and the corresponds nouns and preverbs (§15.1.1.4).

Table 22.1: Orientation adverbs

Orientation	Bare	Basic	Distal	Approximate
Upwards	<i>taš</i>	<i>atu</i>	<i>tçetu</i>	
Downwards	<i>pa</i>	<i>aki</i>	<i>tçeki</i>	
Upstream	<i>lo</i>	<i>alo</i>	<i>tçelo</i>	<i>loc^hu</i>
Downstream	<i>t^hi</i>	<i>at^hi</i>	<i>tçet^hi</i>	<i>t^huc^hu</i>
Eastwards	<i>ku</i>	<i>aku</i>	<i>tçeku</i>	<i>kuc^hu</i>
Westwards	<i>ndi</i>	<i>adi</i>	<i>tçendi</i>	<i>nduc^hu</i>

30574 There are four series of adverbs shown in Table 22.1. With the exception of
 30575 the adverbs of the vertical dimension (UPWARDS and DOWNWARDS), the other
 30576 series are trivially derived from the bare adverbs by prefixation of *a-*, *tçe-* (perhaps
 30577 related to the postposition *tce* §8.2.4.3) and *-c^hu* (§8.2.4.2).

30578 The bare adverbs are most often directly placed before an orientable verb
 30579 (§15.1.2) bearing a preverb encoding the same orientation, as in (84) and (87). The
 30580 adverb *ku*, though homophonous with the ergative in isolation (§8.2.2), is often
 30581 pronounced [ku] as in the recording of (87), due to regressive assimilation from
 30582 the preverb *ko-*.

- 30583 (84) *tx-mpja tce t^hi c^hwi-yi, tx-yyndzo*
 AOR-be.warm LNK downstream IPFV:DOWNSTREAM-come AOR-be.cold

30584 *tce lo lu-ce*
 LNK upstream IPFV:UPSTREAM-come
 30585 '(Contrary to expectations), when (the weather) becomes warm it comes
 30586 downstream, and when it becomes cold it goes upstream.' (24-kWmu,
 30587 27-28)

30588 This is not the exclusive function of bare orientation adverbs however: they
 30589 can also refer to a static location unrelated to the orientation of the verb, and
 30590 non-adjacent to it (85). However, the basic and distal adverb are more often used
 30591 in this function.

30592 (85) *kui ri ci (...) pjui-sui-ytsa-nui, ndi ri li ci*
 east LOC one IPFV:DOWN-CAUS-be.planted-PL west LOC again one
 30593 *pjui-sui-ytsa-nui*
 IPFV:DOWN-CAUS-be.planted-PL
 30594 '(In former times, when people installed the loom, they would) plant one
 30595 (sharpened peg) in the east (left), another one in the west (right) (to attach
 30596 the upward extremity of the warp threads).' (vid-20140429090403, 139)

30597 All four series of orientation adverbs can be followed by the core locative post-
 30598 positions (§8.2.4.1) as in (85), (86) and (87).

30599 (86) *qalia_s nutcu lu-zo tce akui ri ku-ru, andi ri*
 eagle DEM:LOC IPFV:land LNK east LOC IPFV:EAST-look west LOC
 30600 *nui-ru*
 IPFV:WEST-look
 30601 'Eagles land there and look around (to the east and the west, looking for
 30602 food).' (140522 Kamnyu zgo, 224)

30603 Example (87) shows that distal orientation adverbs can occur in the same con-
 30604 text as locative relator nouns in -cu (§8.3.4.1).

30605 (87) *wi-ndycu nutcu, duuxpakyrpu yuu wi-me nui kui k^hri*
 3SG.POSS-west DEM:LOC ANTHR GEN 3SG.POSS-daughter DEM ERG seat
 30606 *pjy-ta tce kui ko-ru. tce teelo nutcu pimawozyr*
 IFR:DOWN-put LNK east IFR:EAST-look LNK upstream DEM:LOC ANTHR
 30607 *yuu wi-k^hri nui pjy-ta-nui tce, t^hi*
 GEN 3SG.POSS-seat DEM IFR:DOWN-put-PL LNK downstream
 30608 *c^ho-ru-nui tce*
 IFR:DOWNSTREAM-look-PL LNK
 30609 'On the west side, the daughter of Gdugpa Dkarpo placed her seat and

30610 turned it towards the east. On the downstream side, (the servants) placed
 30611 Nyima 'Odzer's seat, and turned it towards the upstream direction.'
 30612 (2011-04-smanmi, 239-240)

30613 The bare adverbial stems can be compounded to build nouns of dimension
 30614 (§5.5.2.2)

30615 In addition to the adverbs in Table 22.1, we also find *txton* 'uphill', UPWARDS
 30616 and *trzun* 'downhill', DOWNWARDS specifically indicating orientation upwards
 30617 and downwards a slope. They can be associated with both the vertical (UPWARDS,
 30618 DOWNWARDS) and the fluvial (UPSTREAM, DOWNSTREAM) orientations, as shown
 30619 by (88), where the motion verb *ce* 'go' and the manipulation verb *tsum* 'take
 30620 away' take the fluvial orientation UPSTREAM with *txton*, but the vertical orienta-
 30621 tion DOWNWARDS with *trzun*.

30622	(88)	<i>tce txton lu-ce</i>	<i>pupuŋunjv, snama</i>	<i>txton tsa</i>	
		LNK uphill IPFV:UPSTREAM-go TOP	beast.of.burden	uphill a.little	
30623		<i>lú-wy-tsum</i>	<i>pur-pui-ra</i>	<i>nx</i>	
		IPFV:UPSTREAM-INV-take.away COND~PST.IPFV-be.needed ADD			
30624		<i>wi-kon̥taþ</i>	<i>tu-sua-ysuy-nuu</i>	<i>tce nuu kuu</i>	
		3SG.POSS-front.strap IPFV-CAUS-be.tight-PL LNK DEM ERG			
30625		<i>lu-ryci</i>	<i>jnu-ra.</i>	<i>trzun pjui-ce pupuŋunjv,</i>	
		IPFV:UPSTREAM-pull SENS-be.needed	downhill	IPFV:DOWN-go TOP	
30626		<i>wi-sjy̥t</i>	<i>cʰui-sua-ysuy-nuu</i>	<i>jnu-ra.</i>	
		3SG.POSS-crupper IPFV:DOWNSTREAM-CAUS-be.tight-PL SENS-be.needed			
30627		'When it _i goes uphill, (that is) if they need to lead the beast _i of burden on			
30628		an upward slope, they need to tighten the front strap of the saddle for it _i			
30629		to pull (the burden). When it _i goes downhill, they need to tighten the			
30630		crupper.'			
30631		(30-tAsno, 101)			

30631 Despite their *-n* coda (§3.3.3), these adverbs are native words, as shown by their
 30632 Tshobdun cognates *tótəm* 'uphill' and *tójət* 'downhill' (Sun & Blogros 2019: 123–
 30633 4). The expected Japhug forms would be †*txtom* and †*trzut*, respectively. The
 30634 coda *-n* probably results from the coalescence of the inherited adverb with the
 30635 demonstrative *nuu*.

30636 22.2.7 Postverbal elements

30637 The only part of speech that is always located after the main verb is the sentence
 30638 final particles (§10.4, §21.8). With the exception of right dislocated constituents
 30639 (§22.1.3), only a handful of other words can occur post-verbally.

30640 Some ideophones (mainly pattern II, §10.1.7.4) can be put after the verb, option-
 30641 ally with the emphatic *zo* as in (89), even in some relative clauses (§23.3.6).

- 30642 (89) *nure tu-rŋyβ-nuu p̪rwaŋprwŋ zo*
 DEM:LOC IPFV-attach-PL IDPH(II):solidly EMPH
 30643 ‘They attach it (the plough) solidly there (on the hybrid yaks’ horns).’
 30644 (25-stuxsi, 12)

30645 Only three adverbs can occupy postverbal position. First, the emphatic *zo* (§26.1.1.5)
 30646 commonly occurs after the main verb in constructions expressing high degree
 30647 (§26.1), as in (90).

- 30648 (90) *tce nunu tú-wy-ndza rca u-tui-tcur*
 LNK DEM IPFV-INV-eat UNEXP:FOC 3SG.POSS-NMLZ:DEG-be.sour
 30649 *saxas zo.*
 be.extremely:FACT EMPH
 30650 ‘When one eats it, it is very sour.’ (16-CWrNgo, 232)

30651 Second, the degree adverb *tsa* ‘a little’ is postverbal when used in a comparative
 30652 construction (§26.2.2), as in (91).

- 30653 (91) *tcʰitcum paxci nuu tce tce, uu-jwaš nuara izora ji-paxci*
 TOPO apple DEM LNK LNK 3SG.POSS-leave DEM:PL 1PL 1PL.POSS-apple
 30654 *stʰuci muu-puu-yrtum kuu puu-rŋji tsa*
 so.much NEG-SENS-be.round ERG SENS-be.long a.little
 30655 ‘Pears (Chuchen apples), their leaves are not as round as (those of) our
 30656 apples, but a bit longer.’ (07-paXCi, 54)

30657 Third, the temporal adverb and quantifier *ntsui* ‘always’ has the same ranges of
 30658 meaning as when in preverbal position (§22.2.1) when following the main verb:
 30659 it can either indicate a constant state (92) or a recurrent action (93).

- 30660 (92) *tuxpalyskvr a<nuu>rŋi ntsui.*
 whole.year <AUTO>be.green:FACT always
 30661 ‘It remains always green the whole year.’ (08-saCW, 19)
- 30662 (93) *tcʰeme uu-skvt kuu-snui~sna ci kuu zo*
 girl 3SG.POSS-voice SBJ:PCP-EMPH~be.nice INDEF ERG EMPH
 30663 *tú-wy-nuu-yrkʰyzŋga-nuu ntsui.*
 IPFV-INV-APPL-call-PL always
 30664 ‘A girl whose voice was very nice was calling them again and again.’
 30665 (2003 kandZislama, 9)

30666 22.3 Non-verbal predicates

30667 While a Japhug sentence generally requires a finite verb forms to be complete,
 30668 there are nevertheless some constructions in which a noun or a nominalized verb
 30669 form serves as predicate by itself.

30670 First, zero copula predicate nominals are attested, in particular to name a referent (object or person) by showing it/him/her. For instance, in (94), the subject
 30671 is the demonstrative *kuki* ‘this’ and the nominal predicate *syndyr* ‘thimble’.
 30672

- 30673 (94) *kuki syndyr. kuki syndyr. izora kurui ra tce syndyr*
 DEM.PROX thimble DEM.PROX thimble 1PL Tibetan PL LNK thimble
 30674 *tu-kui-ti nyu.*
 IPFV-GENR-say be:FACT
 30675 ‘(Pointing to a thimble) This is a thimble. This is a thimble. We Tibetans
 30676 call it ‘thimble’.’ (video-2014-04-29-09-5104, 3-5)

30677 Absence of copula is also attested in multicausal constructions, for instance
 30678 in alternative concessive conditionals (§25.2.3.2) as in (95).

- 30679 (95) *tce tuu-ci nuunai, puu-nui-xtci ny tatc^hontc^honj,*
 LNK INDEF.POSS-water DEM PST.IPFV-AUTO-be.small ADD waterfall
 30680 *puu-nui-wxti ny tate^honjt^honj.*
 PST.IPFV-AUTO-be.big ADD waterfall
 30681 Water (falling down from a cliff), whether it is big or small, (is called) a
 30682 ‘waterfall’. (hist 180428 tatChoNtChoN, 9)

30683 The zero copula construction is however considerably rarer than the copular
 30684 construction (§22.5.1.1), even in the same context, when the speaker names a
 30685 referent and points it/him with the finger as in (96).

- 30686 (96) *kuki cnat ny*
 DEM.PROX heddle be:FACT
 30687 ‘(Pointing to a heddle) This is a heddle.’ (video-2014-04-29-09-0403, 27)

30688 Second, exclamative expressions with a degree nominal (§16.3.3), exclamative
 30689 nouns (§5.1.2.8) can also be used as main predicate, followed by a sentence final
 30690 particle such as *nu*, without any finite verb form.

30691 Third, inflectionalized phatic expressions (§14.7.1) and interjections (§10.2.1)
 30692 such as *mts^hyri* ‘how strange’ as in (97) can form complete utterances on their
 30693 own without any verb.

- 30694 (97) *ki mts^hyri, kuaki a-βyo ki a-taꝝ*
DEM.PROX how.strange DEM:PROX 1SG.POSS-FB DEM:PROX 1SG.POSS-on
30695 *wu-tuu-pe nu*
3SG.POSS-NMLZ:DEG-be.good SFP
30696 'How strange, this uncle of mine is so nice to me.' (140511 alading-zh, 54)

30697 Fourth, the nouns *wu-mdor* 'colour' and *smulym* 'prayer' have been grammaticalized as sentence-final modality markers (§21.8.3).

30699 22.4 Noun-verb collocations and light verb constructions

30700 While Japhug has a very productive system of denominal verbalizer prefixes de-
30701 scribed in Chapter 20, it is also possible to build predicates out of nouns using
30702 noun-verb collocations, built in particular from a few highly frequent light verbs.
30703 Apart from nouns, ideophones are also used with light verbs, but this question
30704 is studied in §10.1.7.

30705 22.4.1 Intransitive verbs

30706 In collocations involving intransitive verbs, the associated noun is the intransi-
30707 tive subject, so that the verb verb form is invariably 3SG (§14.2.7).

30708 22.4.1.1 Motion verbs

30709 The motion verbs *yi* 'come' and *ce* 'go' (§15.1.2.1) are used with the nouns of cog-
30710 nition *wu-sum* 'mind' and *wu-bjiz* 'wish' in the lexicalized collocations *wu-sum+ce*/
30711 *wi yi* 'want' and *wu-bjiz+yi* 'wish', which take complement clauses (§24.6.3.3).

30712 They also occur with temporal nouns. The verb *ce* 'go' occurs with *tr-rzaꝝ*
30713 'time' and *ta-za* 'free time' to express the meaning 'spend (one's time)', as in (98),
30714 an excerpt from a conversation where Tshendzin describes her daily activities.
30715 In this function, the whole collocation can be subjected to the facilitative *γ-*
30716 derivation (§18.9.1).

- 30717 (98) *nuu kuu-fse ntsuu a-rzaꝝ pnu-ce γu.*
DEM SBJ:PCP-be.like always 1SG.POSS-time IPFV:WEST-go be:FACT
30718 *tr-nypyri-a q^he li ci <sanbu> ju-ce-a q^he, tce nuu*
AOR-have.dinner-1SG LNK again once walk IPFV-go-1SG LNK LNK DEM

- 30719 *kui-fse* *ntsui* *spikuku* ***a-ba***
 SBJ:PCP-be.like always everyday 1SG.POSS-free.time
 30720 ***c^hui-ce*** *ŋu*.
 IPFV:DOWNSTREAM-go be:FACT
 30721 ‘(...), this is how I spend my time. And after dinner, I go on a walk, this is
 30722 how I spend my time every day.’ (conversation 2015-12-05)

30723 The verb *yi* ‘come’ on the other hand is found with nouns referring to seasons
 30724 (99) or parts of the day (100).

- 30725 (99) *ununui ftear* *jɪ-ye* *q^he*, *nui* *juŋ-kaŋ* *q^he*
 DEM summer AOR-come[II] LNK DEM IPFV-hatch LNK
 30726 ‘When the warm season (spring) comes, it hatches, and ...’
 30727 (25-akWzgumba, 104)
- 30728 (100) *turmuŋ* *ko-yi*
 evening IFR-come
 30729 ‘The evening came.’ (many examples)

30730 It also expresses the occurrence of specific events like catastrophes (101).

- 30731 (101) *tanji* *to-yi*
 drought IFR-come
 30732 ‘There was a drought.’ (25-kAmYW, 1)

30733 The combination of *ce* ‘go’ with the locative noun *w-pa* ‘below’ (§8.3.4.1), in
 30734 addition to the trivially predictable meaning ‘go below X’, is also used in the
 30735 sense of ‘take all of X for oneself (of things that do not exclusively belong to
 30736 oneself)’ (102) when the verb has the Autive *nui-* (§19.1.3). In this construction,
 30737 the agent (the person taking the things) is encoded as possessor of *w-pa*, and the
 30738 patient (the things taken) as the intransitive subject of *nui-ce*.

- 30739 (102) *uzo w-pa* *jɪ-nui-ce*
 3SG 3SG.POSS-down IFR-AUTO-go
 30740 ‘S/he took all of it for him/herself.’ (elicited)

30741 The verb *ce* ‘go’ also occurs in collocation with a few nouns designating places
 30742 or objects to express the meaning ‘go and do’, in particular with *skyrwa* ‘circam-
 30743 bulation’ and *jyŋyt* ‘terrace’, ‘toilet’¹¹ as in (103) and (104).

¹¹In traditional houses in the Japhug-speaking area, toilets are built on a remote side of the covered terrace surrounding the house. The term as now been extended to modern flush toilets.

- 30744 (103) *skyrwa ko-ce*
 circambulation IFR-go
 30745 ‘He went to do circumbulations.’ (elicited)

- 30746 (104) *azo jyxt ci lu-ce-a ny*
 toilet INDEF IPFV:UPSTREAM-go-1SG SFP
 30747 ‘I am going to the toilet.’ (2005 khu, 13)

30748 These collocations correspond to denominal verbs in *ruu-* (§20.4.1).
 30749 The ablative motion verb *toz* ‘come out’ (§15.1.2.1) is commonly found in the
 30750 meaning ‘grow’ (of plants), but also occurs in a few more lexicalized collocations,
 30751 with *tr-re* ‘laugh’ as in (105) or with *tr-rmi* ‘name’ (106). More of these collocations
 30752 have corresponding transitive constructions with *tçyt* ‘take out’ (§22.4.2.3), such
 30753 as *tr-re + tçyt* ‘mock’ and *tr-rmi + tçyt* ‘give a name’.

- 30754 (105) *wi-re pjy-tob*
 3SG.POSS-laugh IFR-come.out
 30755 ‘S/he laughed.’ (elicited; refers to an involuntary action)
- 30756 (106) *wi-rmi to-tob*.
 3SG.POSS-name IFR:UP-come.out
 30757 ‘He became famous.’ (elicited)

22.4.1.2 The anticausative verb *ndzor* ‘be attached’

30758 The anticausative *ndzor* ‘be attached’ (§18.5.3), in addition to its function as a
 30759 quasi-existential verb (§22.5.1.2) and also its dynamic meaning ‘cling onto, lean
 30760 on, grab’ (example 119, §18.5.5) or ‘land’ (with flying creatures),¹² occurs in lex-
 30761 icalized collocations with a few nouns. With nouns referring to plant parts, it
 30762 can mean ‘grow’ (§18.5.3); with *tr-rjit* ‘offspring’ or *tr-puu* ‘young’, its meaning is
 30763 ‘become pregnant’ (of humans or non-human animals), as in (107).

- 30764 (107) *icq^ha <sanshengmu> nuu yuu wi-rfit*
 30765 the.mentioned ANTHR DEM GEN 3SG.POSS-offspring
 30766 *ko-ndzor*
 IFR-ACAU:attach
 30767 ‘Sanshengmu became pregnant with a child.’ (150826 baoliandeng, 46)

¹²The meaning ‘land’ is more commonly expressed with the verb *zo* ‘land’, probably borrowed from the Tshobdun cognate of *ndzor* ‘be attached’.

30768 With time periods such as *qartsu* ‘winter’ or *ftcar* ‘summer’, it is synonymous
 30769 with the motion verb *yi* ‘come’ above (§22.4.1.1) as shown by (108).

- 30770 (108) *tce ui-fsaq^he ftcar ky-ndzor^h q^he li*
 LNK 3SG.POSS-next.year summer AOR-ACAUS:attach LNK again
 30771 *tu-tor.*

IPFV-come.out

30772 ‘The next year, when the warm season (spring) arrives, it comes out
 30773 again.’ (8-qromJoR, 142)

30774 It can also be used like the dummy transitive *ta* ‘put’ (§22.4.2.6) with the noun
 30775 *sya* ‘rust’ (109) in the meaning ‘become rusted, get rust’, with a function similar
 30776 to that of the *nu-* denominal prefix (compare *nusya* ‘get rust’, §20.7.1).

- 30777 (109) *sya ko-ndzor^h*
 rust IFR-ACAUS:attach
 30778 ‘It became rusted.’ (elicited)

30779 22.4.1.3 Existential verbs

30780 Existential verbs (§22.5.1.2) commonly take inalienably possessed nouns as sub-
 30781 jects. Some of these collocations can be analyzed as instances of the *mihi est*
 30782 possessive construction (§22.5.2). For instance, the combination of *ta-ka* ‘free
 30783 time’ with the existential verbs has the compositional meaning ‘have time’ (83,
 30784 §21.3.3.2, 175, §21.5.1.4), and apart from the fact that it can take complement clau-
 30785 ses (§24.6.3.4), this collocation does not stand out as particularly lexicalized. The
 30786 present section focuses on cases where the meaning of the collocation is not
 30787 straightforwardly derivable from that of its constituent parts.

30788 The noun *tu-sumpa* ‘mind’ (borrowed from 藏语 *sems.pa* ‘mind’), occurs with
 30789 the existential verb *tu* with the meaning ‘keep/have in mind, remember’, with
 30790 the experiencer marked as possessor, for instance 1SG in (110).

- 30791 (110) *txjmyy ui-sy-tu nuu a-sumpa tu*
 mushroom 3SG.POSS-OBL:PCP-exist DEM 1SG.POSS-mind exist:FACT
 30792 ‘I have in mind (I know, I did not forget) the places where there are
 30793 mushrooms.’ (elicited)

30794 The collocation of the noun *ui-gryl* ‘order, rule’ (from Tibetan གླུ ཁྲୟල གླ ཁྲୟල ‘row’, a
 30795 meaning still preserved in the intransitive denominal verb *nugryl* ‘be in a row’) with the negative existential verbs *me* or *maje* is very commonly used to indicate

30797 high degree, in particular in the degree nominal construction (§26.1.2.1), as in
 30798 (111) *u-tuu-syy-mu* *u-gryl* *maje*
 3SG.POSS-NMLZ:DEG-PROP-fear 3SG.POSS-order not.exist:SENS

30800 'It is extremely frightening/fearsome.' (khu 2012, 43)

30801 It is also compatible with dynamic verbs, as in (112).

30802 (112) *tsu u-tuu-mbuut* *u-gryl* *maje*
 road 3SG.POSS-NMLZ:DEG-ACAUS:take.off 3SG.POSS-order not.exist:SENS
 30803 'The road had collapsed to a considerable extent.' (2010-1, 17)

30804 This collocation has a second unrelated meaning: 'be impudent, be shameless,
 30805 act in an outrageous way' as in (113), where the possessive prefix can be other
 30806 than 3SG.

30807 (113) *tuu-si* *ty-mdä* *kuny nuu kui-fse* *nuu-tuu-nyre, nuu*
 2-die:FACT AOR-be.the.time also DEM SBJ:PCP-be.like SENS-2-laugh DEM
 30808 *ny-gryl* *u-tuu-me* *nuu!*
 2SG.POSS-order 3SG.POSS-not.exist SFP
 30809 'Even as you are about to die, you are laughing like that, what
 30810 impudence!' (140516 guowang halifa-zh, 70-71)

30811 This collocation can be causativized and reflexivized (§18.3.4) as *u-gryl*+*zyyryyme*
 30812 'cause oneself to act shamelessly' as in (114).

30813 (114) *ji-wa* *c^ho* *c^ha* *ku-tshi-ndzi* <*shafa*> *u-tas* *zuu*
 1PL.POSS-father COMIT alcohol IPFV-drink-DU sofa 3SG.POSS-ON LOC
 30814 *tu-nuijmyzdy^β-ndzi* *tee* *ku-rnguu-ndzi* *q^he tee*
 IPFV-sleep.on.opposite.directions-DU LNK IPFV-lie.down-DU LNK LNK
 30815 *u-gryl* *zo* *nuu-zyy-yym-e-ndzi* *nuu-cti*
 3SG.POSS-order EMPH IPFV-REFL-CAUS-not.exist-DU SENS-be.AFF:FACT
 30816 'He and my father would drink alcohol, sleep on the sofa one over the
 30817 other in opposite directions, presenting themselves in a poor light.'
 30818 (17-lhazgron, 112-113)

30819 While the constructions above do not have any equivalent denominal derivation,
 30820 the collocation of existential verbs with nouns relating to meals such as
 30821 *ts^ha* 'tea, breakfast', *saxsui* 'lunch' or *ty-pyyri* 'dinner' has the same meaning as the

30822 intransitive *nu-/nvr-* denominal prefix (§20.7.1). For instance, (116) with the deno-
 30823 minal verb *nvr̥ri* ‘have dinner’ is a natural answer to (115) with the existential
 30824 verb (see also 53b, §20.7.1).

- 30825 (115) *nx-pyri tu-púu-tu?*
 30826 2SG.POSS-dinner QU-PST.IPFV-exist
 ‘Did you have dinner?’
- 30827 (116) *pua-tu, nuu kɔsmuz tʂ-nx-pyri-j*
 30828 PST.IPFV-exist DEM just.before AOR-DENOM-dinner-1PL
 ‘We did, we just had dinner.’ (conversation, 2016-04-12)

30829 22.4.1.4 The intransitive auxiliary *pa*

30830 The transitive verb *pa* ‘do’ (§22.4.2.5) has an intransitive counterpart *pa* (§14.5.1.4),
 30831 which is used as auxiliary for ideophones (§10.1.7.1), and can also select a numeral
 30832 as subject, meaning ‘pass X years’ (117) (see also 106, §7.3.4.3).

- 30833 (117) *tcizo ni kʂ-amufse-tci nuu jinde kuβdysqi*
 30834 1DU DU AOR-know.each.other-1DU DEM nowadays forty
tu-ro to-pa
 30835 3SG.POSS-excess IFR-pass.X.years
 30836 ‘We have known each other for more than forty years.’ (‘More than forty
 years passed’, 12-BzaNsa, 3)

30837 It is not possible in this construction to replace the bare numeral by the counted
 30838 noun *tu-xpa* ‘one year’. For a historical perspective on this construction, see
 30839 §7.3.1.7 and §7.3.4.3.

30840 22.4.1.5 Other intransitive collocations

30841 The categories listed above do not exhaust all lexicalized collocations involving
 30842 intransitive verbs. Table 22.2 provides additional examples. In addition, there are
 30843 also frozen collocations with nouns and/or verbs not otherwise attested (§22.4.3).

30844 Some of these collocations resemble Chinese constructions, and may have
 30845 been calqued, for instance *tu-ro + ɳgyr* ‘be petty-minded’ (compare with 心胸
 30846 狹窄 <xīnxiōng xiázhǎi> ‘be petty-minded’). In other case, the resemblance with
 30847 Chinese may be a parallel development: the use *ngras* ‘be torn’, ‘break(vi)’ (§18.5.1)
 30848 in *ɳyrkʰa + ngras* ‘break (of dawn)’ reminds of 破曉 <pòxiǎo> ‘daybreak’, but this
 30849 metaphor is not limited to Chinese.

Table 22.2: Other intransitive collocations (excluding orphan nouns/verbs)

Noun	Verb	Meaning
<i>çyrkʰa</i> ‘dawn’	<i>ngrax</i> ‘be torn’	‘break (of dawn)’
<i>tuu-kyrnoz</i> ‘brain’	<i>mtçur</i> ‘turn’	‘feel dizzy’
<i>tuu-sum</i> ‘mind’	<i>βdi</i> ‘be well’	‘be relieved’
<i>tuu-skʰruu</i> ‘body’	NEG+ <i>βdi</i> ‘be well’	‘be pregnant’
<i>tuu-ro</i> ‘chest’, ‘breast’	<i>ŋyrr</i> ‘be narrow’	‘be petty-minded’

30850 The collocation meaning *tuu-skʰruu* + NEG + *βdi* ‘be pregnant’ (118) requires a ne-
 30851 gative prefix (§13.1.3) on the verb form. The denominal verb *nuskʰruu* ‘be pregnant
 30852 with’ (§20.7.2) derived from this construction however is only based on the noun,
 30853 and does not integrate the verbal root as could have been expected (§20.13.1).

- 30854 (118) *tuu-skʰruu* *mx-βdi* *tce* *nuunu qartsʰaz tu-se*
 GENR.POSS-body NEG-be.well:FACT LNK DEM deer 3SG.POSS-blood
 30855 *yuu-tsʰi* *mx-βdi* *ma*
 INV-drink:FACT NEG-be.well:FACT LNK
 30856 ‘(People say that) when one is pregnant, it is not good to drink deer
 30857 blood.’ (27-qartshAz, 108-109)

30858 22.4.2 Transitive verbs

30859 22.4.2.1 *βzu* ‘make’

30860 The verb *βzu* ‘make’, borrowed from དྲ ཚྱ བྱྴ ‘make; manufacture’, serves as a cau-
 30861 sative auxiliary (§24.5.1.1), and occurs in a wide range of complex predicates, in
 30862 particular with action nominals (§24.4.3.1), simultaneous action nominals (§16.4.3,
 30863 §24.4.3.2) and compound action nouns (§24.4.3.3). In this section, we focus on
 30864 constructions with nouns that are not derived from verbs.

30865 The verb *βzu* is found with noun meaning ‘method’ or ‘manner’ such as *ftçaka*
 30866 and *kowa* in complement-taking collocations meaning ‘try to X by any means’
 30867 or ‘prepare’ (§24.6.3.1).

30868 It also occurs with nouns of speech activity (of Tibetan origin), as in *kʰramba* + *βzu*
 30869 ‘tell lies’ (147, §21.4.3.1), *tuu-skṛt* + *βzu* ‘do/say something meaning X’ (§24.6.3.2) or
 30870 *tuu-lvñ* + *βzu* ‘give an answer’ (with the addressee as possessor of the object, 119).

22 Simple clauses

- 30871 (119) *a-lyn na-βzu*
 1SG.POSS-answer AOR:3→3'-make
 30872 ‘He gave me an answer.’ (elicited)

30873 With names of languages, *βzu* means ‘speak *X*’ as in (120). It is also found with
 30874 abstract nouns and also relator nouns in a variety of collocations (Table 22.3).

- 30875 (120) *mbroχpa-skṛt ky-βzu jnui-mk^hyz-nui*.
 nomad-language INF-make SENS-be.expert-PL
 30876 ‘They speak the nomad language (Amdo Tibetan) very well.’ (140522
 30877 RdWrJAt, 129)

Table 22.3: Collocations of *βzu* ‘make’ with abstract nouns

Noun	Meaning when used with <i>βzu</i>	Reference
<i>w-rtso</i> ‘vengeance’	‘get revenge on’	
<i>w-ts^hṛt</i> ‘instead of, on behalf of’	‘do instead of, replace’	§8.3.3
<i>w-sci</i> ‘instead of’	‘do instead of, replace’	
	get revenge on, answer	
<i>w-q^hu</i> ‘after, behind’	‘support, back up’	§8.3.4.2

30878 The verb *βzu* ‘make’ is attested in the dummy subject construction (§14.3.5)
 30879 with three types of nouns.

30880 First, it occurs with nouns of natural phenomena (Table 22.4), as illustrated by
 30881 (121).

Table 22.4: dummy subject collocations with *βzu* ‘make’ (natural phenomena)

Noun	Orientation	Meaning
<i>qale</i> ‘wind’	upwards	‘blow (of wind)’
<i>tṛye</i> ‘sun’	westwards, upwards	‘appear (of the sun)’
<i>tṛrmbja</i> ‘lightning’	upwards	‘appear (of lightning)’
<i>mbyurlōs</i> ‘thunder’	upwards	‘occur (of thunder)’
<i>tṛrta</i> ‘wave’	upwards	‘appear (of a wave)’

- 30882 (121) *nunu qale a-tv-βze q^he, icq^ha nu*
DEM wind IRR-PFV-make[III] LNK the.aforementioned DEM
30883 *yuu-nuu-tsum q^he,*
INV-AUTO-take.away:FACT LNK
30884 ‘Whenever there is wind, it blows (this insect) away.’ (28-kWpAz, 163)

30885 Second, it is found with parts of plants or animals in the meaning ‘grow’ or
30886 ‘develop’, as in *tr-spuu+βzu* ‘ester, have pus’ (§20.1.2). A defective verb *βze* ‘grow’
30887 based on the third stem of *βzu* has been created by backformation from this func-
30888 tion (§12.2.2.3).

30889 Third, the abstract nouns *u-ts^hyt* ‘with proper measure’ (distinct from its use in
30890 Table 22.3, see §8.3.3) and *u-tsa* ‘with proper measure, fit, adapted’ are found in a
30891 transitive but subjectless construction meaning ‘X fit/be the right size/quantity/
30892 degree for Y’ which encodes the referent Y as possessor, and X as an absolute
30893 phrase: in (122), the head-internal relative clause (§23.5.3.3) in brackets does not
30894 receive ergative marking.

- 30895 (122) (*a-xtsa ly-tuu-su-yut-ndzi nuu) a-tsa wuma*
1SG.POSS-shoe AOR:UPSTREAM-2-CAUS-bring-DU DEM 1SG.POSS-fit really
30896 *nuu-βze*
SENS-make[III]
30897 ‘The shoes that you have sent me fit me very well.’ (conversation,
30898 2015-04-18)

30899 Many of the locutions in *βzu* have a semantics close to denominal derivations
30900 in *ru-/ry-* and *mu-* (§20.1.2). In addition, *βzu* corresponds to the *yuu-* prefix in the
30901 case of *yulyn* ‘answer’ (§20.5.2), a verb similar in meaning to *tuu-lyn+βzu* (119)
30902 and also to *suu-* in *sundzupe* ‘sit without crossing legs’ (§20.3.2).

30903 22.4.2.2 *lvt* ‘release’

30904 The basic meaning of the verb *lvt* is ‘throw’ when employed with an inanimate
30905 object (like *tudi* ‘arrow’, see 24, §22.1.1.5), ‘pour’ when applied to liquids or con-
30906 tainers (§127, §18.5.6) and either ‘release, let go’ (72, §8.2.3.2) or ‘see X off’ with
30907 a human object (144, §8.2.9). It is very productively used with noun-verb com-
30908 pounds with *rpu* ‘bump into’ or *tc^hu* ‘gore’ as second element (see examples 231
30909 and 232, §16.4.7).

30910 Like *βzu* ‘make’, *lvt* is attested with *tuu-* action nominals (§24.4.3.1), though this
30911 construction is less productive and limited to a few items such as *tuu-muruzuz+lvt*

30912 ‘make a scratch’ (from *murbuuz* ‘scratch’) or *tu-rkyz+lvt* ‘make an engraving’
 30913 (from *rkyz* ‘carve’). It also occurs with the inalienably possessed bare action nominal
 30914 *tu-suuso* ‘thought’ (§16.4.6). From *tu-suoso+lvt* ‘think’, the antipassive verb
 30915 *rususo* ‘think’, ‘ponder’ (§18.6.1) was derived by denominal derivation.

30916 With iterative counted nouns (§7.3.2.5) as object, *lvt* is highly common with
 30917 the meaning ‘do X times’, where X represents the numeral prefix on the counted
 30918 noun (123).

- 30919 (123) *mbro nuu kuu riryβ rayri χsuu-tyxur ta-lvt*
 horse DEM ERG mountain each three-lap AOR:3→3'-release
 30920 ‘The horse made three laps around each mountain.’ (2003 Kunbzang,
 30921 480)

30922 With the counted nouns *tuu-rzuy* ‘one section’ and *tuu-ydrt* ‘one section’, *lvt*
 30923 means ‘cut into X pieces’, as in (124).

- 30924 (124) *kuiβde-rzuy zo tó-wy-lvt pjy-wy-sat*
 four-section EMPH IFR-INV-release IFR-INV-kill
 30925 ‘(The thief) killed him by cutting him into four pieces.’ (140512
 30926 alibaba-zh, 115)

30927 Example (124) shows that the counted noun is not the direct object: the inverse
 30928 (§14.3.3.3) on both verbs *tó-wy-lvt* and *pjy-wy-sat* (§25.4.1.4) shows that both share
 30929 the same (obviative) object, and therefore that the object is the patient (the person
 30930 that was killed), not the counted noun. This referent is also relativized like an
 30931 object (§23.5.3) using an object participial relative (125).

- 30932 (125) *kʰa kui-qanuu~nuu uu-ŋguu zuu, nykinuu,*
 house SBJ:PCP-EMPH~be.dark 3SG.POSS-in LOC FILLER
 30933 *tuu-çp̪β kuiβde-rzuy t̪-ky-lvt nuunuu*
 INDEF.POSS-corpse four-section AOR-OBJ:PCP-release DEM
 30934 *ku-suu-yl̪yi-a cʰa-a cti ny!*
 IPFV-CAUS-be.connected[III]-1SG can:FACT-1SG be.AFF:FACT SFP
 30935 ‘(not only this, but) I am (even) able to put together a corpse that had
 30936 been cut into four pieces in a dark house.’ (140512 alibaba-zh, 170)

30937 With *tuu-* action nominals, *lvt* also has an iterative meaning, but the number of
 30938 occurrences of the action is indicated by a numeral after the noun as in (126).

- 30939 (126) *tua-muartsuy* *χsum to-lxt*
 NMLZ:ACTION-pinch three IFR-release
 30940 'He pinched him three times.' (elicited)

30941 Noun expressing hitting actions such as *tuqartsu* 'kicking'¹³ in collocation
 30942 with *lxt* also indicate the number of hits by a free numeral (127). In this con-
 30943 struction, the patient is not encoded as direct object, but as an oblique argument
 30944 with the relator *ui-taꝝ* 'on, above' (§8.3.4.3).

- 30945 (127) *ui-taꝝ* *nuitcu tuqartsu ㅂ니다 to-lxt*
 3SG.POSS-on DEM:LOC kicking two IFR-release
 30946 'He kicked two times on it.' (150824 kelaosi-zh, 64)

30947 A handful of action nominals such as *tut-ṣuβ* 'sewing' can however take nu-
 30948 meral prefixes to indicate the number of iterations, as in (128).

- 30949 (128) *ㅂ니다-tur-ṣuβ* *ntsui cʰú-wy-lxt ra.*
 two-NMLZ:ACTION-sew always IPFV-INV-release be.needed:FACT
 30950 'It has to be sewed two times.' (12-kAtsxWb, 83)

30951 Table (22.5) presents examples of collocations with *lxt* 'release'. From the mean-
 30952 ing 'throw, release' (an arrow), *lxt* acquired the sense of 'shoot' with shooting
 30953 weapons, and then 'hit' with body parts or other weapons. Additionally, it came
 30954 to mean 'use' with various types of instruments and implements.

30955 The verb *lxt* is the productive way to derive predicates from recent Chinese
 30956 loanwords designating machines. Combined with 电话 <diànhuà> 'telephone'
 30957 (131, §21.4.2.2, 210, §21.5.2.3) and 汽车 <qìchē> 'car' it means 'phone' and 'drive
 30958 a car', respectively. It also occurs with nouns expressing actions derived from
 30959 verbs such as 放假 <fàngjià> 'have a holiday', with a 3PL generic subject (§14.6.2)
 30960 in (129).

- 30961 (129) *a-ye* *ra γuu pʂjkʰu zatsa <fangjia> müj-lxt-nu*
 1SG.POSS-grandchild PL GEN yet early vacation NEG:SENS-release-PL
 30962 'My grandchild (and the rest of his class) are not yet on vacations.'
 30963 (conversation, 2014-12-24)

30964 Some nouns occurring with *lxt* are also compatible with other light verbs, with
 30965 slightly different semantics. For instance, from the noun *rγyo* 'song', the locution

¹³The *tua-* prefix on this noun synchronically neither an action nominal prefix nor a numeral prefix).

Table 22.5: Examples of collocations with *lxt* ‘release’

Noun	Orientation	Meaning
<i>tuu-mci</i> ‘saliva’	UPWARDS	‘spit’
<i>tx̥jkʰut</i> ‘first’	UPWARDS	‘punch’
<i>ç̥ymuydu</i> ‘gun’	UPWARDS	‘shoot (with a gun)’
<i>mdaszuiy</i> ‘bow’	UPWARDS	‘shoot (with a bow)’
<i>tsʰa</i> ‘salt’	DOWNWARDS	‘put salt (on)’
<i>taqaβ</i> ‘needle’	UPWARDS	‘prick with a needle’
<i>tuu-mke</i> ‘neck’	DOWNWARDS	‘slit X’s throat’
<i>tx̥-mtsui</i> ‘button’	UPWARDS	‘button up’
<i>tx̥-mtu</i> ‘knot’	‘up-, down-, eastwards, downstream’	‘tie a knot’
<i>sycuu</i> ‘key’	DOWNWARDS	‘lock’
<i>z̥ngro</i> ‘jew’s harp’	WESTWARDS	‘play the jew’s harp’
<i>juli</i> ‘flute’	DOWNSTREAM	‘play the flute’
<i>pax̥tsa</i> ‘piglet’	DOWNSTREAM	‘bear a piglet’

30966 *r̥yo* + *βzu* has the trivial meaning ‘sing, sing a song’ (87, §24.4.3.1), synonymous
 30967 with the denominal *nur̥yo* ‘sing’ (§20.7.1), while *r̥yo* + *lxt* means ‘play a tune on
 30968 an instrument’, reminiscent of the use of *lxt* with musical instruments.

30969 The verb *lxt* is also found with nouns referring to meteorological phenomena
 30970 in the dummy subject construction (§14.3.5), for instance with *tuu-mu* ‘sky,
 30971 weather’ (130) and *tx̥pa* ‘snow’ (131). In both examples, it takes the C-type EAST-
 30972WARDS preverb *ka-* (*tuu-mu* also occurs with the orientation DOWNWARDS).

- 30973 (130) *tuu-mu* *ka-lxt* *wi-mpʰru* *nui tu.*
 INDEF.POSS-sky AOR:3→3'-release 3SG.POSS-after DEM exist:FACT
 30974 ‘It is found after rain (has fallen).’ (23-mbrAZim, 79)

- 30975 (131) *qartsui* *tce* *tcendyre* *tx̥pa* *wuma zo* *ka-lxt* *tce*
 winter LNK LNK snow really EMPH AOR:3→3'-release LNK
 30976 ‘In winter, when a lot of snow has fallen,’ (24-kWmu, 21)

30977 Collocation with *lxt* correspond to various denominal derivations: *ru-* (*juli* + *lxt*
 30978 ‘play the flute’ → *rujuli* ‘play the flute’, §20.4.1), *nu-* (*ç̥ymuydu* + *lxt* ‘shoot with a

30979 gun' → *nuq̥ymuydu* 'shoot at', §20.7.2) and *sui-* (*tuiqartsu* + *lvt* 'kick' → *suqartsu* 'kick', §20.3.2).

30981 22.4.2.3 *tçyt* 'take out'

30982 The manipulation verb *tçyt* 'take out' (§15.1.2.2) has a wide range of derived mean-
30983 ings, including the relatively straightforward 'remove' (3, §26.1.1.1), 'expel, ban-
30984 ish' (29, §6.5), 'take off (clothes)' (24, §23.3.4), but also 'raise (a child)' (46, §6.5.1)
30985 and 'earn (food)' (25, §6.4). It occurs as auxiliary in a marginal causative con-
30986 struction (111, §24.5.1.1).

30987 Unlike *βzu* and *lvt*, it almost never used with *tui-* action nominals, except with
30988 the lexicalized noun *tupyaš* 'field clearing' (§16.4.5), from which the irregular
30989 antipassive *r̥ypyaš* 'reclaim land' is derived by denominal derivation (§18.6.3).

30990 Table 22.6 collects the most common collocations with *tçyt*. Most of the nouns
30991 in this table are inalienably possessed. In the case of body parts, with the meaning
30992 'stick out', the possessive prefix is coreferent with the transitive subject (3SG in
30993 132).

- 30994 (132) *ts^hut^ho-pui tui-rdoš kui u-ku to-tçyt.*
kid-DIM one-piece ERG 3SG.POSS-head IFR-take.out
30995 'One of the little kids stuck its head out of (the wolf's belly).' (140430
30996 lang he qizhi xiaoshanyang-zh, 135)

30997 In the collocations whose gloss contains an X, the possessive prefix corre-
30998 sponds to this X referent, for instance the recipient in *u-ftçyfk̥yt+tçyt* (133).

- 30999 (133) *a-ftçyfk̥yt ci t̥y-tçyt tce jisŋi tç^hi zo juu-nvme-a*
1SG.POSS-idea INDEF IMP-take.out LNK today what EMPh IPFV-do[III]-1SG
31000 *pe*
be.good:FACT
31001 'Make me a suggestion, what should I do today?' (140515 jiesu de
31002 laoren-zh, 130)

31003 The nouns in the first section of Table 22.6 are also compatible with *łor* 'come
31004 out' as light verb (§22.4.1.1). In most cases, the *łor* collocations are functional an-
31005 ticausatives of the *tçyt* collocations, as in *u-tç^har+łor* 'have a handicap, be muti-
31006 lated' vs. *u-tç^har+tçyt* 'cause a handicap, mutilate' (134b) (a noun borrowed from
31007 疆 *tç^hag* 'decrease, break') or *tui-sroš+łor* 'lose one's life' vs. *tui-sroš+tçyt* 'cause
31008 to lose one's life'. The only exception is *t̥y-rmi+łor* 'become famous', whose se-
31009 mantics is not derivable from *t̥y-rmi+tçyt* 'give a name'.

Table 22.6: Examples of collocations with *tçrt* ‘take out’

Noun	Orientation	Meaning
<i>tx-lu</i> ‘milk’	DOWNWARDS	‘milk (a cow)’
<i>tx-se</i> ‘blood’	DOWNWARDS	‘cause bleeding’
<i>tuu-qom</i> ‘tear’	DOWNWARDS	‘shed tear(s)’
<i>tuu-sroz</i> ‘life’	UPWARDS	‘cause X to lose one’s life’
<i>tuu-çtʂi</i> ‘sweat’	DOWNWARDS	‘cause X to sweat’
<i>tx-re</i> ‘laugh’		‘mock X’
<i>u-tçʰaʂ</i> ‘handicap’	DOWNWARDS	‘cause X a handicap, mutilate X’
<i>tx-rmi</i> ‘name’	UPWARDS	‘give a name to X’
<i>tuu-ro</i> ‘chest’, ‘breast’	UPWARDS	‘stick out one’s chest’
<i>tuu-ku</i> ‘head’	‘upwards, downstream’	‘stick one’s head out’
<i>qajy</i> ‘fish’	UPSTREAM	‘catch (a fish)’
<i>u-βlu</i> ‘trick’, ‘idea’	UPWARDS	‘suggest an idea, a trick to X’
<i>u-ftçxkfkt</i> ‘idea’, ‘advice’	UPWARDS	‘make a suggestion to X’
<i>txndxryri</i> ‘illegitimate child’	DOWNWARDS	‘have an illegitimate child’
<i>rjama</i> ‘completion’	DOWNSTREAM	‘put to completion’
<i>tx-qa</i> ‘root’, ‘paw’, ‘bottom’	‘upwards, downstream’	‘uproot, ‘put X to completion, do X until the end’

- 31010 (134) a. *a-mi u-tçʰaʂ pui-łos*
 1SG.POSS-leg 3SG.POSS-handicap AOR-come.out
 ‘My leg became handicapped (as a result of an accident).’ (elicited)
- 31011 b. *az o kurn, a-tçʰaʂ pjur-tur-tçrt jui-ju*
 1SG also 1SG.POSS-handicap IPFV-2-take.out SENS-be
 ‘(Not only did you do all these crimes), you also mutilate me.’ (tou
 dongxi de xiaohai-zh, 27)

31015 The noun *u-βlu* ‘trick’, ‘idea’ forms its corresponding intransitive construction
 31016 with the existential verb *tu* (example 162, §22.5.1.2).

31017 The collocation of *tçyt* with *wi-qa* ‘(its) root’ can have the compositional mean-
 31018 ing ‘uproot’ (135) like the denominal verb *nryqa* ‘uproot’ (§20.7.2), but it also used
 31019 in the sense of ‘do completely, until the end’ as in (136). This meaning is also
 31020 found with the nouns *rjama* (from *ရှမာ* *rja.ma* ‘tail’), *tr-jme* ‘hair’ and the relator
 31021 noun *wi-ndo* ‘edge, border’ (§8.3.4.2).

- 31022 (135) *tsyep^byt nunaui wi-qa tú-wy-tcxt tce,*
 31023 plaintain DEM 3SG.POSS-root IPFV:UP-INV-take.out LNK
pjú-wy-yx-la tce tuu-cya kuu-mñym phyn
 31024 IPFV-INV-CAUS-soak LNK GENR.POSS-tooth SBJ:PCP-hurt be.efficient:FACT
tu-ti-nui
 31025 IPFV-say-PL
 31026 ‘People say that, if one digs out the plantain’s root and soak it in water,
 it is efficient against toothache.’ (12-ndZiNgri, 46-47)
- 31027 (136) *nui ky-ndum lonba uzo pjui-syze tce wi-qa c^bwi-tcxt*
 31028 DEM INF-read all 3SG IPFV-start[II] LNK 3SG.POSS-root IPFV-take.out
 31029 ‘(This monk is in charge) of reading (the sūtras) from the beginning
 until the end.’ (160721 XpWN, 44)

31030 Some of the collocations in *tçyt* correspond to denominal verbs in *nu-*, for
 31031 instance *nuqajy* ‘fish’ (§20.7.1) or *nryre* ‘laugh’, a labile verb meaning ‘mock’ when
 31032 transitive (§14.5.1.3) like *tr-re + tçyt*. Alternatively, *tr-rmi + tçyt* ‘give a name’ and
 31033 *tuu-ctsi + tçyt* ‘cause to sweat’ rather correspond to sigmatic causative denominal
 31034 verbs (§20.3.2).

31035 22.4.2.4 *ndo* ‘take’

31036 The basic meaning of *ndo* is ‘take’ (1, §19.1.1) or ‘have in the hand’ with the UP-
 31037 WARDS orientation, ‘catch’ (24 §16.1.1.2), ‘grab’ (56, §14.3.2.5), or ‘get attach to,
 31038 stick on’ (137) with the EASTWARDS preverbs.

- 31039 (137) *pú-wy-nymyle tuu-jas ku-ndym zo cti ma,*
 31040 IPFV-INV-touch GENR.POSS-hand IPFV-take[III] EMPH be.AFF:FACT LNK
wi-tas, wi-ndzury zo kui-fse tu.
 31041 3SG.POSS-on 3SG.POSS-resin EMPH SBJ:PCP-be.like exist:FACT
 31042 ‘When one touches it (a type of mushroom), it sticks on one’s hand, as
 there is some kind of resin-like thing on it.’ (21-kuGrummAG, 21)

31043 Table 22.7 presents a non-exhaustive list of lexicalized collocations with *ndo*.
 31044 With the noun *tui-jas* ‘hand’, it can predictably mean ‘grab by the hand’ (118,
 31045 §21.4.1.3) or ‘stick on the hand’ (137), but in the imperative it can be interpreted
 31046 as ‘don’t interfere, don’t meddle in it’.

Table 22.7: Examples of collocations with *ndo* ‘take’

Noun	Orientation	Meaning
<i>w-kʰryt</i> ‘set, determined’	EASTWARDS	‘control’
<i>w-rtsawa</i> ‘importance’		‘control’
<i>w-mdor</i> ‘colour’		‘have X’s colour’
<i>tsu</i> ‘road’	EASTWARDS	‘guard the road’
<i>tui-mt̪hi</i> ‘mouth’	EASTWARDS	‘shut up’
<i>tr-puu</i> ‘young’	UPWARDS	‘get pregnant’ (animals)
<i>w-rtsuz</i> ‘number’		EASTWARDS
<i>w-χsyv</i> ‘number’	number of	
<i>rjylpu</i> ‘king’	‘upwards, upstream’	‘become king’
<i>turma</i> ‘household’	EASTWARDS	‘memorize/mark down’ ‘establish a family’

31047 The collocation of *ndo* with *w-kʰryt* ‘set, determined’ can take finite comple-
 31048 ment clauses as in (138).

- 31049 (138) *tce kuuki χsui-ldzi ra ci, kuβde-ldzi*
 LNK DEM.PROX three-long.object be.needed:FACT QU four-long.object
 31050 *ra nuunu, tuzo w-kʰryt kú-wy-nui-ndo*
 be.needed:FACT DEM GENR 3SG.POSS-determined IPFV-INV-AUTO-take
 31051 *tce*
 LNK
 31052 ‘One has to control whether one needs three or four threads (for a given
 31053 colour).’ (vid-2014-04-29-092115, 76)

31054 In addition to *rjylpu* ‘king’ in Table 22.7, *ndo* can be used with all nouns refer-
 31055 ring to a status or a charge (such as *χpuun* ‘monk’) to mean ‘become X, assume
 31056 the charge of X’. In this function, collocations in *ndo* correspond either to *ru-*/
 31057 *rr-* (§20.4.1) or *nui-* (§20.7.1) denominal derivations.

31058 With numerals, *ndo* indicates ‘be moving into one’s X’, without using the
 31059 counted noun *-p̪v̪rme* ‘X years old’, as shown by (139).

- 31060 (139) *kuβdesqaptury, kuβdesqamnuz ko-ndo pur-yu ma*
 forty.one forty.two IFR-take SENS-be LNK
 31061 ‘She is moving into her forty-one, forty two years old.’ (14-siblings, 339)

31062 In addition, *ndo* is used in the meaning ‘catch (a disease)’ in the dummy subject
 31063 construction, with *trmtsʰyz* ‘hyperostosis’ as only argument for instance.

31064 Another dummy subject construction of *ndo* with the noun *tuu-pʰoŋbu* ‘body’,
 31065 is only found as the infinitive complement of either *kʰuu* ‘be possible’ or *sycʰa* ‘be
 31066 possible’ in negative form, the whole construction meaning ‘cannot help shiver-
 31067 ing’ (due to cold), as in (140).

- 31068 (140) *wi-tuu-muactas ky-ti kuu [tuu-pʰoŋbu ky-ndo] zo*
 3SG.POSS-NMLZ:DEG-be.cold INF-say ERG GENR.POSS-body INF-take EMPH
 31069 *mu-pur-sy-cʰa*
 NEG-PST.IPFV-PROP-can
 31070 ‘It was so cold that one could not help shivering.’ (29-RmGWzWn2, 15)

31071 22.4.2.5 *pa* ‘do’

31072 The native verb *pa* ‘do’¹⁴ has been largely superseded by the Tibetan borrowing
 31073 *βzu* ‘make’ (§22.4.2.1) in the sense of ‘do, make’. It still means ‘do what’ when used
 31074 with the interrogative *tɕʰi* ‘what’ (236, §15.2.10.2), but as a complement-taking
 31075 verb it rather means ‘discuss and decide’ (§24.5.2). It is one of the few verb with
 31076 ergative lability (§14.5.1.4), and its intransitive counterpart is a light verb used
 31077 with numerals (§22.4.1.4) and ideophones (§10.1.7.1).

31078 The causative *supa* either has a tropative function ‘consider to be’ (§17.2.5.9),
 31079 or serves in various periphrastic constructions (§24.5.1.1; §24.5.1.3). Its passive
 31080 *apa* ‘become’ (§18.1.2) is used as inchoative copula (§22.5.1.1), and its reflexive is
 31081 the verb of pretense *zyrypa* ‘pretend’ (§18.3.1.1, §24.4.2.3; see 141 below).

31082 As a transitive light verb, *pa* occurs in relatively fewer constructions than the
 31083 previous verbs. It means ‘close’ when used with *kum* ‘door’ (141) or *kʰuyŋŋu* ‘win-
 31084 dow’, but also with nouns meaning ‘light’, ‘lamp’ or electrical implements like
 31085 phones, with either DOWNSTREAM or EASTWARDS orientations.

¹⁴The root *pa* is cognate of Tibetan དུ་ ‘*b'ed;b'as*’ ‘do’; the yod medial Tibetan is unexplained, but not shared by cognates in its closest relatives (Jacques 2013d).

- 31086 (141) *ju-kur-ce* *ty-zypa* *ny, kum nuu ci la-cuu, ci*
 IPFV-SBJ:PCP-go AOR-pretend ADD door DEM once AOR:3→3'-open once
 31087 *t^ha-pa* *ny, kr-anba^h juu-ŋu*
 AOR:3→3'-close ADD AOR-hide SENS-be
 31088 ‘She pretended to go (out), she opened the door, and then closed it, and
 31089 hid (inside the house).’ (2003 Kunbzang, 405)

31090 Although *pa* does occur with *ci* in its adverbial meaning ‘once’ (§22.2.1) as in
 31091 (141), a lexicalized collocation *ci+pa* ‘get married’ is also found (142).

- 31092 (142) *amaŋ, βdaŋmu, ci* *kr-pa-tci* *nuist^huci zo* *ty-nyrza^h* *ny*
 INTERJ lady one AOR-do-1DU so.much EMPH AOR-pass(time) ADD
 31093 *ri*
 LNK
 31094 ‘Oh, my lady, so much time has passed since we got married, but ...’
 31095 (2005 Kunbzang, 414)

31096 With the Autive prefix (§19.1.3), *pa* occurs with nouns such as *βzajsa* ‘friend’ or
 31097 *yufs^hu* ‘friend’ in the meaning ‘become friend’. This construction is also possible
 31098 with social relation collectives in *kyndzi-* (§5.7.8.1) as in (143).

- 31099 (143) *a!* *jinde kyndzi-yufs^hu nu-pa-tci*
 INTERJ now COLL-friend AUTO-do:FACT-1DU
 31100 ‘Let us be friends!’ (smanmi 2003.1, 53)

31101 22.4.2.6 *ta* ‘put’

31102 The manipulation verb *ta* ‘put’ also means ‘leave (vt)’ (168, §14.6.1.5) and ‘let go’
 31103 like *l^hrt* ‘release’ (a polysemy reminiscent of Chinese 放过 <fàngguò> ‘let pass’).
 31104 Its lexicalized agentless passive *ata* ‘be on’ (§18.1.2) is used as an existential verb
 31105 (§22.5.1.2).

31106 Unlike *βzu* (§22.4.2.1) and *l^hrt* (§22.4.2.2), it is not used with *tuu-* action nomi-
 31107 nals, except for the lexicalized nominalization *tupu* ‘moxibustion’ (on which see
 31108 §16.4.5).

31109 Table 22.8 presents a representative sample of collocation in which it occurs.
 31110 The collocations *ts^ha+ta* ‘make tea’ and *k^hon+ta* ‘steam’ derive from ‘put *X*
 31111 on (the hearth tripod)’, a meaning that is still obvious in examples such as (144).

Table 22.8: Examples of collocations with *ta* ‘put’

Noun	Orientation	Meaning
<i>tuu-ku</i> ‘head’	UPSTREAM	‘lie down’
<i>tuu-mi</i> ‘foot, leg’	DOWNTOWARDS	‘tread’
<i>ui-taꝝ</i> ‘on’	EASTWARDS	‘leave X with, put the fault on’
<i>tx-çpʰyt</i> ‘patch’	EASTWARDS	‘put a patch’
<i>tupu</i> ‘moxibustion’	EASTWARDS	‘use moxibustion’
<i>fsaq</i> ‘fumigation’	DOWNTOWARDS	‘make fumigations’
<i>kʰon</i> ‘steamer’	EASTWARDS	‘cook by steam’
<i>tsʰa</i> ‘tea’	EASTWARDS	‘made tea’
<i>tx-rte</i> ‘hat’	UPWARDS	‘put on, wear’

- 31112 (144) *tx-tcu* *nui kui qapi* *χsum nui pa-ta*
 INDEF.POSS-boy DEM ERG white.stone three DEM AOR:3→3':DOWN-put
 31113 *ndyre, nui ui-taꝝ* *ndzi-tsʰa* *ka-nui-ta-ndzi*
 LNK DEM 3SG.POSS-on 3DU.POSS-tea AOR:3→3' -AUTO-put-DU
 31114 ‘The boy placed the three stones (on the ground), and they made their
 31115 tea on it.’ (2003 Kunbzang, 186-187)

31116 With head covers or implements worn on one’s body (such as *χçrlmuy* ‘glasses’),
 31117 the verb *ta* occurs with the autive in the meaning ‘put on, wear’.

31118 In dummy subject construction (§14.3.5), *ta* ‘put’ is also attested with nouns
 31119 such as *ɛja* ‘verdigris’ or *tx-rqʰu* ‘shell, hull, cuticle’ to express spontaneous growth
 31120 on a surface, as in (145) with the orientation ‘toward east’ *ku-* and stem III.

- 31121 (145) *zaŋ cʰo rab ni ɛnabna zo ɛja ku-te juu-ŋu*
 copper COMIT brass DU both EMPH verdigris IPFV-put[III] SENS-be
 31122 ‘Both copper and brass get verdigris.’ (30-Com, 101)

31123 22.4.2.7 *rku* ‘put in’

31124 The manipulation verb *rku* ‘put in’ occurs in considerably fewer collocations than
 31125 the previous verbs. In addition to its basic meaning, it can be used in the sense
 31126 of ‘pour (water, grain) into a container’ (example 82, §8.2.3.2), ‘give a parting
 31127 present’ (236, §16.5.1) and also ‘fix a joint dislocation’.

31128 Prefixed with the Autive *nū*- (§19.1.3), it occurs with the relator noun *w-pa*
 31129 ‘below, under’ (§8.3.4.1) and *tu-ku* ‘head’ in *w-pa+nurku* ‘subjugate, vanquish’
 31130 (146), literally ‘put X under oneself’ and *tu-ku+nurku* ‘meddle into (other peo-
 31131 ple’s business)’. In both cases, the possessive prefix on the noun is coreferent
 31132 with the subject.

- 31133 (146) *nū rjylpu kur-kui-tu nū pjuu-cui-njam-a,*
 DEM king TOTAL~SBJ:PCP-exist DEM IPFV-CAUS-be.defeated[III]-1SG
 31134 *nūnū a-pa pjuu-nūrke-a ra*
 DEM 1SG.POSS-under IPFV-AUTO-put.in[III]-1SG be.needed:FACT
 31135 ‘I have to defeat all the kings (in the world), to subjugate them.’ (150821
 31136 edu de wangzi-zh, 8)

31137 Without Autive prefix, *rku* is also found in oblique nominalized form with *tu-*
 31138 *ku* and the negative existential *me* as in (147)

- 31139 (147) *ny-ku sy-rku kui-me*
 2SG.POSS-head OBL:PCP-put.in SBJ:PCP-not.exist
 31140 ‘(Something) that is none of your business.’ (elicited)

31141 In the dummy subject construction (§14.3.5), *rku* is attested with *tç^huwur* ‘blis-
 31142 ter’ and *cimbyrom* ‘blister’ (148) (see also 66, §23.5.3.4).

- 31143 (148) *ty-rza_b kui-rjfi tu-kui-ηke q^he,*
 INDEF.POSS-time SBJ:PCP-be.long IPFV-GENR:S/O-walk LNK
 31144 *tu-mypa ri cimbyrom tu-rke ηgrvl.*
 GENR.POSS-sole LOC blister IPFV-put.in[III] be.usually.the.case:FACT
 31145 ‘If one walks for a long time (with bad shoes), one gets blisters on one’s
 31146 soles.’ (27-tWfCAL, 140)

31147 22.4.2.8 *ts^hor* ‘attach’

31148 The verb *ts^hor* ‘attach’ (§18.5.3) only occurs in a handful of collocations with non-
 31149 dummy subject: *tu-χpum+ts^hor* ‘knee’ (§17.2.4.9) and *k^huma+ts^hor* ‘hunt with
 31150 dogs’.

31151 In the dummy subject construction (§14.3.5), *ts^hor* has the sense of ‘grow’ with
 31152 nouns referring to plant parts (§18.5.3), in particular *w-mat+ts^hor* ‘bear fruits’ (see
 31153 examples 160, §8.2.11 or 67, §23.5.3.4). Its anticausative *ndzor* ‘attach’ (§22.4.1.2)
 31154 also occurs with the same meaning.

31155 22.4.2.9 Other transitive collocations

31156 Table 22.9 presents a list of collocations with verbs other than those discussed
 31157 above. The manipulation verb *mja* ‘take’, ‘pick up’ (whose historical morpholo-
 31158 gy is discussed in §19.7.3) and *cui* ‘open’ each occur in a few non-compositional
 31159 expressions. Note that *tutso* ‘experience’ is the lexicalized action nominal of *tso*
 31160 ‘know, understand’ (§14.2.3).

Table 22.9: Other transitive collocations (excluding orphan nouns/verbs)

Noun	Verb	Meaning
<i>w-mpʰru</i> ‘after, following’	<i>mja</i> ‘take’, ‘pick up’	‘continue (after a break), change shift’
<i>tutso</i> ‘experience’	<i>mja</i> ‘take’, ‘pick up’	‘have experience’
<i>tui-rnoš</i> ‘brain’	<i>cui</i> ‘open’	‘deafen’
<i>tsu</i> ‘road’	<i>cui</i> ‘open’	‘give way’
<i>tui-nja</i> ‘debt’	<i>sti</i> ‘stop up’	‘pay a debt by labour’
<i>ts̥tsʰoš</i> ‘nail’	<i>no</i> ‘drive’ (cattle)	‘hammer nails’

31161 Although the noun *ts̥tsʰoš* ‘nail’ probably derives from *tsʰoš* ‘attach’ (§22.4.2.8),
 31162 the two cannot be used as a collocation, and *ts̥tsʰoš* rather selects *no* ‘drive’ or
 31163 the causative verb *s̥tsa* ‘pierce’ with the DOWNWARDS preverbs to express the
 31164 meaning ‘hammer nails into’.

31165 22.4.3 Frozen collocations

31166 The noun-verbs collocations studied in the previous sections involve partially
 31167 grammaticalized verbs that can be combined with a considerable variety of nouns.
 31168 The following focuses on more opaque collocations, which comprise either nouns
 31169 or verbs that are not otherwise attested (§22.4.3.1, §22.4.3.2) and/or which are
 31170 borrowed from Tibetan (§22.4.3.3).

31171 22.4.3.1 Orphan noun

31172 Orphan nouns do not exist in free form, and are only found in collocations, or as
 31173 members of frozen compounds.

31174 Some orphan nouns are found in collocations with (mainly transitive) light
 31175 verbs (§22.4.2). A few items from this list originate from Tibetan verbs: *sax* is

31176 from ས୍ରେg ‘burn’, *ndaj* from ནଦ୍ୟ ‘*day* ‘think about, long for’ and *mt^hoŋ* from མ୍ତ୍ୱ ‘
 31177 *mt^hoŋ* ‘see’, while *wu-rtsa* is from the noun རୁଁ ‘root’. Pure Tibetan collocations
 31178 are treated in §22.4.3.3.

31179 The orphan noun *wu-snurzu* is borrowed from གୁନ୍ଧୁ བୋସ ‘comfort’; the
 31180 variant *wu-snurzu* is semi-nativized by reanalyzing the *snu-* from གୁ ས୍ନିଗ୍ ‘heart’
 31181 as the *status constructus* *snu-* of its native cognate *tuu-sni* ‘heart’.

31182 The nouns *tr-rte^hyaŋ* and *wu-snurzu* are otherwise attested as the bases from
 31183 which the denominal verbs *svrtc^hyaŋ* ‘quibble about’ and *yrrtc^hyaŋ* ‘quibble’ on
 31184 the one hand, and *nusnurzu* ‘comfort’ on the other, are derived.

Table 22.10: Orphan nouns used with light verbs

Noun	Light verb	Orientation	Meaning
<i>wu-mt^hoŋ</i>	<i>toŋ</i> ‘come out’	<i>nu-</i>	‘be exposed’
<i>ngartum</i>	<i>yut</i> ‘bring’	<i>pu-</i>	‘dive’ (of birds of prey)
<i>jasa</i>	<i>ta</i> ‘put’	<i>tr-</i>	‘respect’
<i>prvdrja</i>		<i>pu-</i>	‘claw around, make a mess’
<i>saŋ</i>		<i>kr-</i>	‘brand’ (with iron)
<i>taŋmbra</i>	<i>lxt</i> ‘release’	<i>tr-</i>	‘jump’ (of horse)
<i>trlyo</i>		<i>kr-</i>	‘catch with a lasso’
<i>wu-ndaj</i>		<i>pu-</i>	‘think about’
<i>wu-pu</i>	<i>pa</i> ‘do’	<i>tr-</i>	‘keep well, preserve’
<i>tr-rte^hyaŋ</i>	<i>tcxt</i> ‘take out’	<i>nu-</i>	‘hinder’
<i>wu-rtsa</i>		<i>nu-</i>	‘investigate, get at the root of’
<i>wuŋaj</i>	<i>βzu</i> ‘make’	<i>nu-</i>	‘be self-satisfied’
<i>wu-snurzu,</i>		<i>nu-</i>	‘comfort’
<i>wu-snurzu</i>			

31185 Some of the orphan nouns in Table 22.10 are treated as direct object (for in-
 31186 stance *trlyo*, *saŋ*, *wu-snurzu*), and other ones are semi-objects. The noun *ndaj* can
 31187 have both grammatical functions; in (149a) it is direct object (and the stimulus is
 31188 encoded as its possessor), whereas in (149b) it is semi-object (and the stimulus is
 31189 encoded as direct object and is indexed on *lxt*).

- 31190 (149) a. *nx-ndaj* *lat-a* *cti*
 2SG.POSS-think.about release:FACT-1SG be.AFF:FACT

- 31191 b. *nday* *ta-lxt* *cti*
 think.about 1→2-release:FACT be.AFF:FACT
 31192 'I will think about/be considerate of you.' (elicited)

31193 Other collocations with orphan nouns listed in Table 22.11 involve verbs not
 31194 otherwise used in light verb constructions.

Table 22.11: Orphan nouns in lexicalized collocations

Noun	Light verb	Meaning
<i>u-r̥a</i>	<i>m̥ym</i> 'hurt'	'cherish'
<i>u-tsui</i>	<i>rnaꝝ</i> 'be deep'	'keep the secret'
<i>u-ndzuy</i>	<i>maꝝ</i> 'not be'	'be terrible'
<i>u-rka</i>	<i>γyn</i> 'be evil'	'harbour bad intentions'
<i>u-lu</i>	<i>cui</i> 'open'	'lose consciousness'

31195 Most of the verbs in Table 22.11 are intransitive; the experiencer/main referent
 31196 is encoded as the possessive prefix on the intransitive subject, as the 2SG in (150).

- 31197 (150) *n̥-tsui* *pui-rnaꝝ*
 2SG.POSS-secret SENS-be.deep
 31198 'You are keeping the secret very well.' (elicited)

31199 The collocation *u-lu* + *cui* is a transitive dummy construction (§14.3.5): the ex-
 31200 perienter is marked as possessor of the object *u-lu* (151), and no overt subject can
 31201 appear. To express the meaning 'cause to lose conscience', the causative *sui-cui*
 31202 is needed.

- 31203 (151) *a-lu* *pjy-cui* *k^{hi}*
 1SG.POSS-lose.conscience(1) IFR-lose.conscience(2) HEARSAY
 31204 'I lost conscience (people said).' (elicited)

31205 Some of the nouns in Table 22.11 have etymologies. The noun *u-tsui*, though
 31206 not otherwise attested, presumably originally meant 'secret', as it serves as the
 31207 base of the denominal transitive verb *n̥tsui* 'hide'. The nominal root *-lu* is possibly
 31208 related to the last syllable of *nukulu* 'be lost', 'lose one's way', a denominal verb
 31209 (§20.7.1) from the *ku-* participle (§16.1.1.7) of a verb **lu*, from which *u-lu* would
 31210 be derived (§16.4.2, §16.4.6).

31211 The noun *u-r̥a*, though non-attested on its own, occur in several collocations,
 31212 respectively *u-r̥a + m̥yym* ‘cherish’ with *m̥yym* ‘hurt’ (example 90b, §20.13.1),¹⁵ *u-*
 31213 *r̥a + x̥t̥t̥* ‘concentrate, focus’ with the transitive *x̥t̥t̥* ‘lean on’, and *u-r̥a + tsʰa*
 31214 ‘be thoughtful and considerate of the feelings of others’ with the orphan verb *tsʰa*
 31215 (§22.4.3.2).

31216 22.4.3.2 Orphan verbs

31217 Orphan verbs are much fewer than orphan nouns. Among the verbs in Table 22.12,
 31218 *ri* (example 132, §14.5.1.4) is the transitive labile counterpart of *ri* ‘remain’, ‘be left’
 31219 (§14.5.1.4), and *tsʰa* and *loʂ* are borrowed from Tibetan བྲྲ བྲྲ ‘hot’ and གྱାନྱ གྱାନྱ ‘be
 31220 upside down’. The rest of the verbs are obscure.

Table 22.12: Orphan verbs

Noun	Verb	Meaning
<i>tuu-sroʂ</i> ‘life’	<i>ri</i> (vt)	‘save X’s life’
<i>tuu-sroʂ</i> ‘life’	<i>nuwyr̥tu</i> (vt)	‘risk one’s life’
<i>tuu-t̥ca</i> ‘mistake’	<i>nuj̥t̥</i> (vt)	‘make amends, apologize’
<i>tx̥mbr̥u</i> ‘anger’	<i>ŋgu</i> (vi)	‘get angry’
<i>tuu-mt̥çʰi</i> ‘mouth’	<i>χo</i> (vi)	‘talk big, exaggerate’
<i>u-r̥a</i>	<i>tsʰa</i> (vi)	‘be thoughtful and considerate’
<i>tuu-z̥i</i>	<i>loʂ</i> (vi)	‘have nausea’
<i>sala</i>	<i>zruu</i> (vt)	‘be in the way, be a hindrance’
<i>u-ko</i>	<i>pʰi</i> (vt)	‘be disappointed by’

31221 The lower half of the Table includes collocations comprising both a orphan
 31222 noun and an orphan verb. In such cases, the noun and the verb are given the
 31223 same gloss, with the indices (1) on the former and (2) on the latter, as in (152).

- 31224 (152) *nuutcu tx̥-ryru ma sala nuu-tuu-zri*
 DEM:LOC IMP-get.up LNK be.a.hindrance(1) SENS-2-be.a.hindrance(2)
 31225 *nuu-ŋu*
 SENS-be
 31226 ‘Get up from there, you are in the way.’ (elicited)

¹⁵This collocation can be denominalized as *n̥r̥ç̥ym̥yym* ‘cherish’ (Table 20.21, §20.13.1).

Several orphan verbs are denominalized together with their noun in an incorporating construction (Table 20.21, §20.13.1).

Some orphan verbs can be subjected to voice derivations. For instance, *wu-*
zo + p'i ‘be disappointed by’ has an anticausative *wu-zo + mbi* ‘be discouraged’ (§18.5.4)
 and a facilitative (§18.9.1). The verb *nguu* has an irregular *guu-* causative (§17.2.2.1).

22.4.3.3 Borrowed collocations

Several synchronically opaque noun-verb collocations (with orphan verbs and/or nouns) have been borrowed as a whole from Tibetan, unlike some constructions described in previous sections which combine a noun or a verb from Tibetan with a native word.

Among Tibetan collocations, *t^hurzi + zuu* comprises the noun *t^hurzi* ‘mercy’ (from རྒྱତ୍ର འྲ୍ଲ རྩେ ‘compassion’), which has many functions in Japhug (§8.3.6.2), while the transitive verb form *zuu* (from ཡྲୁ ‘ask’) is not otherwise attested,¹⁶ with the meaning ‘ask for mercy’ (153).

- (153) “wort^ci ny wojyr” *to-ti-nui t^hurzi to-zui-nui*.
 please ADD please IFR-say-PL mercy IFR-ask-PL
 ‘(The boys) asked for mercy, saying ‘please’ one after the other.’ (160704
 poucet4-v2, 24-25)

In other collocations, both the noun and the verb are orphan forms. For instance, *t^ha_s + t^hot* ‘take a decision’ was borrowed from the locution ལྷ ཉ བ ད བ ད ‘be decided’, built from the noun ལྷ ཉ ‘rope’ and the intransitive verb ད ད ‘be cut off’, neither of which are attested as independent words into Japhug. It does not take complement clause, and is better translated as ‘take a decision’ rather than ‘decide’. The verbal element *t^hot* is transitive (unlike Tibetan ད ད ‘be cut off’), and the person making the decision is indexed as subject (154).

- (154) *t^ha_s puu-t^hot-a*
 decide(1) AOR-decide(2)-1SG
 ‘I took a decision.’ (elicited)

Similarly, the intransitive impersonal constructions *t^ho + t^huy* ‘match up’, ‘be compatible’, ‘be conform to each other’ (155) from བ ཉ བ ‘match’, and *wu-*
nguu + t^hon ‘be well-off’, ‘able to take care of oneself’ (156) from བ ཉ བ ‘go. t^hon’ ‘able to take care of oneself’ are synchronically opaque from a Japhug-internal perspective.

¹⁶Note however the verb *ndzuu* ‘accuse, report on’, which is probably borrowed from a non-classical present from **ndzuu* of the verb ཡྲୁ ‘ask’.

- 31258 (155) *wzo kur ta-tut c^ho nyj tu-tu-ti nur t^ho*
 3SG ERG AOR:3→3'-say[II] COMIT 2SG IPFV-2-say DEM match.up(1)
- 31259 *nua-t^huy*
 SENS-match.up(2)
- 31260 ‘What he said and what you are saying match up.’ (elicited)
- 31261 (156) *ci t^huu-kui-rgu~rgyz pur-cti tce, ci*
 one AOR-SBJ:PCP-EMPH~be.old SENS-be.AFF LNK one
- 31262 *kui-xtcu~xtci pur-cti tce, ndzi-ηgu*
 SBJ:PCP-EMPH~be.small SENS-be.AFF LNK 3DU.POSS-be.well.off(1)
- 31263 *my-t^hon tce, azo my-yi-a*
 NEG-be.well.off(2):FACT LNK 1SG NEG-come:FACT-1SG
- 31264 ‘One of them is very old, the other one is very young, they are not able
- 31265 to take care of themselves, I will not come (to the palace and leave them
- 31266 behind).’ (2011-05-nyima, 140)

31267 In addition, there are also partially compositional collocations, both of whose
 31268 elements independently exist in Japhug. For instance, although *tui-sum+βdi* ‘be
 31269 relieved’ (§22.4.1.5) takes its specific meaning from Tibetan བେଶ୍ୱରଦ୍ୱୀପ୍ sems.bde ‘be
 31270 relieved’, both *tui-sum* ‘mind’ (§24.6.3.3) and *βdi* ‘be well’ are otherwise found,
 31271 and also used in a variety of constructions not calqued from Tibetan.

31272 There is at least one case of collocation from Situ: *kʰyli+rgi* ‘be respected, have
 31273 good reputation’, from *kʰalí* ‘wind, reputation’ (cognate of *qale* ‘wind’ and *u-ble*
 31274 ‘reputation’, §5.1.2.2), with a verb from ད୍ୱେ dge ‘virtuous’.

31275 22.5 Copulas and existential verbs

31276 Copulas and existential verbs stand out not simply by their morphological speci-
 31277 ficities (suppletive negation §13.1.2, infix person index §14.2.2 and other §22.5.5),
 31278 but also by their uses as auxiliaries in periphrastic tenses (§21.2.2), and vari-
 31279 ous additional functions, including possessive constructions (§22.5.2), emphasis
 31280 (§22.5.3.1), focalization (§23.6.1, §22.5.3.2), universal negation (§22.5.4), superla-
 31281 tive (§26.4.3) and concessive conditionals (§16.2.2.2).

31282 22.5.1 Basic functions

31283 22.5.1.1 Copulas

31284 With the exception of a handful of predicative nouns (§22.3), a copula is required
 31285 to make a noun phrase or a pronoun predicative in Japhug.

31286 The copulas are a distinct subclass of semi-transitive verbs (§14.2.3), whose
 31287 semi-object is the nominal predicate. There are two assertive copulas, the neutral
 31288 *yu* ‘be’ and the emphatic affirmative *cti* ‘be’, and one suppletive negative copula
 31289 *ma&* ‘not be’ (§13.1.2). The emphatic affirmative copula occurs in particular to
 31290 express contrast, as in (157).

- 31291 (157) *azo βzui cti-a ma, nyki, pya ma&-a*
 31292 1SG mouse be.AFF:FACT LNK FILLER bird not.be:FACT
 31293 ‘(The bat said:) I am a mouse, not a bird.’ (140427 bianfu yu
 huangshulang-zh, 7)

31294 The copulas cannot be used with inchoative meanings (‘become’) in the Aorist
 31295 (§21.5.1.3) or the Inferential (§21.5.2.4) unlike other stative verbs. The Aorist of the
 31296 copulas are only attested to fix a point of temporal reference (§25.3.4.1) and in
 31297 periphrastic tenses (examples 256 in §21.6.2.1 and 94 in §25.5.3). The lexicalized
 31298 passives *apa* and *aβzu* (§18.1.2) replace the copula to express inchoative meaning,
 31299 as shown by (158).

- 31300 (158) *azo tumukumpci ra nuu-tcuu pui-nyu-a ri, [ki*
 31301 1SG heaven PL 3PL.POSS-son PST.IPFV-be-1SG LNK DEM.PROX
kui-fse] nuu-aβzu-a
 31302 SBJ:PCP-be.like AOR-become-1SG
 31303 ‘I used to be a son of heaven, but I became like that.’ (divination 2003,
 30-31)

31304 Person indexation on copula generally follows the subject, in particular when
 31305 both subject and semi-object are non-third person as in (159).

- 31306 (159) *azo nyzo ma&-a kui, a-mu mx-nymqe-a.*
 31307 1SG 2SG not.be:FACT-1SG ERG 1SG.POSS-mother NEG-scold:FACT-1SG
 ‘I am not you, I will not scold my mother.’ (elicited)

31308 However, when the predicate is a first or second person pronoun and the
 31309 subject third person, the copula indexes the non-third person argument. In the
 31310 pseudo-cleft (160) for instance, it would not be grammatical to replace *azo cti-a*
 31311 with a third 3SG copula *tazo cti*. (see also 126 in §23.6.1).

- 31312 (160) *[pui-kur-c^ha] nuu azo cti-a*
 31313 AOR-SBJ:PCP-can DEM 1SG be.AFF:FACT-1SG
 31314 ‘The one who succeeded (in doing these things) was me.’ (qachGa 2003,
 176)

We also find examples of indexation with a (third person) predicative noun, as in (161), where the verb has plural indexation like the predicative noun phrase *st̪ymku nura*, whereas the subject is in the singular. Note that the plural *nura* here cannot be interpreted as approximate location (§9.1.1.2), because in the next sentence the grasslands are analogically referred to by the plural demonstrative pronoun *nura* (§6.9.1).

- (161) *stu w-sy-dyn nui [st̪ymku nura] yu-nui. tce*
 most 3SG.POSS-OBL:PCP-be.many DEM grassland DEM:PL be:FACT-PL LNK
nura nui-ŋguw tce tu-łos yu tce
 DEM:PL 3PL.POSS-inside LOC IPFV-come.out be:FACT LNK
 ‘The place where it is most numerous is the grasslands, and it grows in
 these’ (19-qachGa mWntoR, 24-25)

22.5.1.2 Existential verbs

Unlike other languages of the area such as Khroskyabs (Lai 2017: 250–252), Japhug is relatively poor in existential verbs. The verb *tu* ‘exist’ and its suppletive forms (the Sensory *yṛzu* §14.2.2, the negative *me* ‘not exist’ and the Sensory negative *maje*, §13.1.2) have no selection restrictions on their subjects, and are compatible with abstract nouns (162), inanimate objects (163) and humans (164, 165).

- (162) *azo a-βlu ci tu*
 1SG 1SG.POSS-trick INDEF exist:FACT
 ‘I have an idea.’ (150829 taishan zhi zhu-zh, 199)
- (163) *kucuŋguw nūnūtcu kʰyNqra ci pjy-tu.*
 in.former.times DEM:LOC house.in.ruin INDEF IFR.IPFV-exist
 ‘In former times, there used to be a house in ruin there.’ (140522 Kamnyu
 zgo, 258)

The existential verbs index the person of the intransitive subject, as shown in (164) (see §23.7 on this construction).

- (164) *[juymur kui-nypyri] azo ma me-a.*
 this.evening SBJ:PCP-have.dinner 1SG apart.from not.exist:FACT-1SG
 ‘This evening nobody is having dinner (at home) apart from me.’
 (conversation, 16-04-28)

³¹³⁴² With third person subjects, number indexation is possible as in (165), but op-
³¹³⁴³ tional (§14.6.1.1), and never found in the possessive construction (§22.5.2).

- ³¹³⁴⁴ (165) *kucunγgu bzymi ci pjx-tu-ndzi*
 in.former.times couple INDEF IFR.IPFV-exist-DU
³¹³⁴⁵ ‘In former times, there was a husband and his wife.’ (rkangrgyal 2002.2,
³¹³⁴⁶ 1)

³¹³⁴⁷ The assertive existential verbs can mean ‘be located’, and take associated mo-
³¹³⁴⁸ tion prefixes (§15.2) as in (166).

- ³¹³⁴⁹ (166) *ŋotcu c-pui-tuu-tu-nu?*
 where TRAL-PST:IPFV-2-exist-PL
³¹³⁵⁰ ‘Where (in which places) have you been?’ (2003sras, 57)

³¹³⁵¹ Other meanings include ‘be alive’ as in (167), and ‘be present’ (especially in
³¹³⁵² converbial form *X kuu-tu zo* ‘in *X*’s presence’, see 172, §16.2.1.7).

- ³¹³⁵³ (167) *nŋj ku-tur-tu ú-ŋu*
 2SG PRS-2-exist QU-be:FACT
³¹³⁵⁴ ‘Are you (still) alive?’ (Nyima Wodzer 2003.2, 27)

³¹³⁵⁵ The negative existential verb *me* is also employed in a comparative construc-
³¹³⁵⁶ tion (§26.2.5), and with infinitives in a construction expressing impossibility (§16.2.1.6,
³¹³⁵⁷ §24.4.2.4).

³¹³⁵⁸ Unlike copulas, existential verbs can be used in Aorist, Inferential and Imper-
³¹³⁵⁹ fective with an inchoative meaning (see 130 in §15.1.5.6 and 137 in §15.1.5.7).

³¹³⁶⁰ The lexicalized agentless passives (§18.1.2) *ata* ‘be on’ and *arku* ‘be in’, are
³¹³⁶¹ nascent existential verbs. They do not have semantic restrictions on the subject
³¹³⁶² as in Khroskyabs or Stau (they are attested with first or second person human
³¹³⁶³ subjects, as in 6, §18.1), but indicate the location of the subject: on a surface or in
³¹³⁶⁴ a building in the case of *ata* (168) and inside a closed and narrow space (or inside
³¹³⁶⁵ a compact matter) for *arku* (169).

- ³¹³⁶⁶ (168) *muu-to-ndo-t-a, kʰa a-ta cti tce*
 NEG-IFR-take-PST:TR-1SG house PASS-put:FACT be.AFF:FACT LNK
³¹³⁶⁷ ‘I did not take it (with me), it is (I left it) in my home.’ (150830 afanti-zh,
³¹³⁶⁸ 132)

- 31369 (169) *a-wa* *w-kur* *w-ŋgw* *zua, nwitcu*
 1SG.POSS-father 3SG.POSS-mouth 3SG.POSS-in LOC DEM:LOC
 31370 *tr-rye* *ci* *a-rku* *tce*
 INDEF.POSS-pearl INDEF PASS-put.in:FACT LNK
 31371 ‘In my father’s mouth, there is a pearl.’ (150902 hailibu-zh, 37)

31372 In addition, the anticausative verb *ndzob* ‘be attached’ (§18.5.3, §22.4.1.2 can
 31373 be used to describe the presence of limbs, appendices, excrescence, thorns, hairs
 31374 and twigs on living organisms, as in (170) (see also 19, §18.1.3).

- 31375 (170) *wi-ku* *wi-rkui* *ri ʂja* *zo wi-mvlyjab* *ra*
 3SG.POSS-head 3SG.POSS-side LOC completely EMPH 3SG.POSS-limb PL
 31376 *ku-ndzob* *jw-ŋu*
 IPFV-ACAU:attach SENS-be
 31377 ‘Its legs are located (attached) next to its head.’ (26-mYaRmtsaR, 49)

31378 22.5.2 Possessive constructions

31379 There are two main possessive constructions in Japhug. In the first one, illus-
 31380 trated by (171a), the possesum is the intransitive subject of an existential verb
 31381 (§22.5.1.2) and the possessor is indicated by a possessive prefix on the possesum
 31382 (§5.1.1.2) and (optionally) a genitive phrase (example 172 below, §8.2.3.1). In the
 31383 second one (171b), involving the semi-transitive verb *aro* ‘own’ (§14.2.3), the pos-
 31384 sessor is subject, and the possesum semi-object (§8.1.5); when the possesum is
 31385 an inalienably possessed noun (§5.1.2), it selects the indefinite possessor prefix.

- 31386 (171) a. *a-mkum* *tu*
 1SG.POSS-pillow exist:FACT
 b. *tr-mkum* *aro-a*
 INDEF.POSS-pillow have:FACT-1SG
 31388 (Both) ‘I have a pillow.’ (elicited)

31389 22.5.2.1 Mihi est possessive

31390 The *mihi est*-type construction in (171a) is by far the most frequent one. It dif-
 31391 fers from the usual existential construction in that the number of the possesum
 31392 (intransitive subject) is never indexed on the verb: in (172) for instance, the sub-
 31393 ject *wi-tcui* takes the numeral *sqaptuy* ‘eleven’ but the existential verb *pjy-tu* lacks
 31394 plural indexation. Although number indexation in the existential construction

is optional (§22.5.1.2, §14.6.1.1), its presence is however more common than its absence. The non-indexation in (172) is thus indicative of a significant syntactic difference between the existential and the possessive constructions, despite superficial similarity.

- (172) *rjylpu nuunu yuu u-tcuu sqaptuy zo pjy-tu.*
 king DEM GEN 3SG.POSS-son eleven EMPH IFR.IPFV-exist
 ‘The king had eleven sons.’ (140520 ye tiane-zh, 4)

Inalienably possessed possessums normally take a possessive prefix coreferent with the possessor, even when the possessor is overt and marked with the genitive. In (173), we observe a string of possessive clauses in parataxis, each sharing the same possessor with the genitive (*tuu-tupuu rajri yuu*). The possessums of all of these clauses are inalienably possessed nouns (domestic animals). In the first three clauses, the expected 3PL possessor prefix is present. In the last two however the possessive prefix is absent; this is one of the very rare cases where the possessor is not marked on the possessum in this construction in the corpus.

- (173) *tuu-tupuu rajri yuu, nykinuu, nuu-mbro pjy-tu,*
 one-household each GEN FILLER 3PL.POSS-horse IFR.IPFV-exist
nuu-jla pjy-tu, nuu-nuuya pjy-tu, qazo
 3PL.POSS-hybrid.yak IFR.IPFV-exist 3PL.POSS-COW IFR.IPFV-exist sheep
pjy-tu, ts^hrt pjy-tu.
 IFR.IPFV-exist goat IFR.IPFV-exist
 ‘Every household used to have horse(s), cow-s), hybrid yak(s), sheep and goat(s).’ (150820 kAnWCkat, 2)

The *mihi est* construction can be causativized by subjecting the existential *tu* to the *yrt*-derivation (§17.3.2.3), yielding the verb *yrtu* ‘cause to have’, which marks the beneficiary (corresponding to the possessor of the intransitive construction) with the genitive case, as *nyzuy* in (174), or a as possessor of the object (as in 81, §17.3.2.3).

- (174) *tu-βze-a ky-c^ha nuura lonba zo nyzuy*
 IPFV-make[III]-1SG INF-can DEM:PL all EMPH 2SG:GEN
tr-yx-tu-t-a cti tce
 AOR-CAUS-exist-PST:TR-1SG be.AFF:FACT LNK
 ‘I endowed you with all the things I could make.’ (140425 shizi
 puluomixiusi he daxiang-zh, 16)

When the *mihi est* possessive construction undergoes relativization, there is ambiguity as to whether the relativized element is the possesum or the possessor, since both intransitive subjects (§23.5.10.1) and possessors (§23.5.1) are relativized by means of (mostly head-internal) subject participial relatives (§16.1.1.4). In (175), the relativized element is the possesum, and in (176) its is the possessor, but these two relative clauses have exactly the same surface structure.

- (175) [nuicunguu yu w-laxte^ha puu-kui-tu] nura
 before GEN 3SG.POSS-thing PST.IPFV-SBJ:PCP-exist DEM:PL
 c-tú-wy-su-rto^h tce,
 TRAL-IPFV-INV-CAUS-look LNK
 ‘They go (there) and show (the child_i) [objects that he_i used to have
 before] (in his_i previous life, when he_i was a lama).’ (160722 skWBli, 6)

- (176) [jla nuu-bruu kui-tu] ra kuiy, nuu-rpa^h
 hybrid.yak 3PL.POSS-horn SBJ:PCP-exist DEM:PL also 3PL.POSS-shoulder
 kui nuu-z-ryci-nuu puu-nyu tce,
 ERG IPFV-CAUS-pull-PL PST.IPFV-be LNK
 ‘Even the hybrid yaks that had horns used to pull (the plough) with their
 shoulders (rather than with their horns).’ (25-stuxsi, 21-22)

Possessive constructions with the existential verb *kui-tu* in participial form can be combined with a negative existential verb *kui-tu me/kui-tu mage* to express the meaning ‘not have any’ as in (177).

- (177) w-rū nuunu, kui-mpciu~mpcu zo nyu,
 3SG.POSS-stalk DEM SBJ:PCP-EMPH~be.smooth EMPH be:FACT
 [w-mdzu ri kui-tu] me
 3SG.POSS-thorn also SBJ:PCP-exist not.exist:FACT
 ‘Its stalk, it is very smooth, and it does not have any thorns.’
 (11-qrontshom, 42)

The *mihi est* possessive construction can be a gradable predicate and occur in a superlative construction (§26.4.3) as in (178) with the abstract noun *ts^huxtor^h* ‘loyalty’.

- (178) fsapar nu w-ŋgu zu (...) k^huna kui-fse zo, nyki,
 animal DEM 3SG.POSS-in LOC dog SBJ:PCP-be.like EMPH FILLER
 w-ts^huxtor^h kui-tu me k^hi
 3SG.POSS-loyalty SBJ:PCP-exist not.exist:FACT HEARSAY
 ‘Among domestic animals, the dog is the most loyal one. (among

31450 domestic animals, there isn't any one which has loyalty like a dog).'
 31451 (05-khWna, 5-6)

31452 Some possessive constructions, involving in particular abstract nouns, are lex-
 31453 icalized and are better described as noun-verb collocations (§22.4.1.3).

31454 22.5.2.2 Non-genitive possessor

31455 There is in addition a third construction, intermediate between those illustrated
 31456 in (171), involving an existential verb, but in which the possessor is rather intrans-
 31457 itive subject, indexed on the verb. It is only attested in double negative, with
 31458 the negative existential verb *me* 'not exist' and a negative verb participle such
 31459 as *mr-kui-pe* '(something) that is not good' as possesum: compare the *mihi est*
 31460 construction (179a) with this third construction (179b), where the verb has 1sg
 31461 indexation. Only one example is found in the whole corpus (identical to example
 31462 179a, but with 1PL possessor).

- 31463 (179) a. *azuy mr-kui-pe ku-me*
 1SG:GEN NEG-SBJ:PCP-be.good PRS-not.exist
 31464 b. *azo mr-kui-pe ku-me-a*
 1SG NEG-SBJ:PCP-be.good PRS-not.exist-1SG
 31465 (Both) 'I don't have any problem/anything bad.' (elicited, based on
 31466 real examples)

31467 22.5.3 Postverbal copulas

31468 Copulas are commonly found in postverbal position, in periphrastic TAME con-
 31469 structions (§21.2.2, §21.5.1.8, §21.5.3.5, §21.6.2.1) and in emphatic and focalization
 31470 functions, as detailed below.

31471 These constructions have in common that the copula remains in 3SG form,
 31472 regardless of the core arguments of the preceding verb. In (180) for instance, the
 31473 copula *ŋu* lacks the 1SG suffix found on the verb *ce-a*, and using here the 1SG form
 31474 *ŋu-a* would be ungrammatical.

- 31475 (180) *nutcu ce-a ŋu*
 DEM:LOC go:FACT-1SG be:FACT
 31476 '(For all these reasons) I am going there.' (2011-04-smanmi, 46)

31477 A question concerning the syntactic structure of these constructions is whether
 31478 part of the clause preceding the copula (*nutcu ce-a*) is a subordinate clause, the

22 Simple clauses

31479 copula being the main verb of the sentence. The fact that post-verbal adverbs
31480 such as *ntsui* (§22.2.7) can located between the verb and the sentence-final cop-
31481 ula, as in (181), is a clue that the part of the sentence preceding the copula is a
31482 syntactic constituent.

- 31483 (181) *tua~ty-tua-nyma-t rcanuu, pe ntsui*
TOTAL~AOR-2-make-PST:TR UNEXP:FOC be.good:FACT always
31484 *cti*
be.AFF:FACT
31485 ‘Everything that you do is always good.’ (150822 laoye zuoshi zongshi
31486 duide-zh, 252)

31487 The pre-copula constituents (*nut̪eu ɬe-a* and *pe ntsui*) cannot be analyzed as fi-
31488 nite relative clauses (§23.2.2), since this type of relatives are restricted to relativiz-
31489 ing objects (§23.5.3) and goals, and are thus not attested with most intransitive
31490 verbs, whereas the postverbal copula constructions are found with all intransitive
31491 verbs without restriction. Another possibility would be to analyze the pre-copula
31492 constituents as complement clauses (§24), whose function would be that of semi-
31493 object of the copula (§22.5.1.1). In this hypothesis, example (180) would literally
31494 be ‘it is (the fact that) I am going there’, and (181) ‘it is that it is always good’.

31495 22.5.3.1 Emphatic assertion/negation

31496 The postverbal copulas can have scope over the whole sentence. Copulas of op-
31497 posite polarity *ŋu/cti* and *maʂ* can be used to mark an emphatic contrast between
31498 two predicates, as in (182) and (183) (§13.2).

- 31499 (182) *tú-wy-ctʂo ŋu ma tú-wy-skyr maʂ*
IPFV-INV-measure be:FACT LNK IPFV-INV-weigh not.be:FACT
31500 ‘One measures (the quantity to be used) by scooping, not by weighing.’
31501 (31-cha, 12)
- 31502 (183) *ŋuu-yʂkʰuu ndʐa cti wo ma, tce a-mpaʂ*
SENS-have.smoke reason be.AFF:FACT SFP LNK LNK 1SG.POSS-eye
31503 *ŋuu-cw-i-mjym ndʐa cti ma, ŋuu-yʂwu-a maʂ*
SENS-CAUS-hurt reason be.AFF:FACT LNK SENS-cry-1SG not.be:FACT
31504 ‘(The reason why I shed tears) is because it is smoky, and it hurts my
31505 eyes, it is not that I am crying.’ (qaCpa 202, 95)

31506 A postverbal assertive copula can put emphasis on the trustworthiness and
31507 reliability of a statement (184).

- 31508 (184) *tcetha nyzo tuu-si cti*
 later 2SG 2-die:FACT be.AFF:FACT
 31509 ‘(Otherwise) you will (certainly) die.’ (2011-04-smanmi, 70)

31510 The postverbal negation *mas* can be combined with the interrogative form of
 31511 the assertive copula *ú-ŋu*, as in (185), to express a rhetorical question concerning
 31512 something that both the speaker and the addressee are supposed to know.

- 31513 (185) ‘*ui-kyrme tui-ldzi a-mx-jy-tuu-ŋut ra'*
 3SG.POSS-hair one-long-object IRR-NEG-PFV-2-bring be.needed:FACT
 31514 *tx-tuat-a mas ú-ŋu*
 AOR-say[II]-1SG not.be:FACT QU-be:FACT
 31515 ‘Didn’t I say: ‘Do not bring back anything, not even a hair (from her
 31516 head).’ (2014-kWIAG., 691)

31517 22.5.3.2 Focalization of a constituent

31518 The most common focalization construction in Japhug is not a pseudo-cleft con-
 31519 struction (§23.6.1) or a focus marker (§9.1.6), but the combination of an overt
 31520 noun phrase or pronoun (§22.1.2.3) with a postverbal copula, as in (186).¹⁷ The
 31521 focalized constituents are indicated in bold. In this construction, the copula is
 31522 never adjacent to the focalized constituent, which is also marked by a specific
 31523 intonation.

- 31524 (186) a. *nyzo ny-tuu-ci c-tx-tuu-nu-ru-t*
 2SG 2SG.POSS-INDEF.POSS-water TRAL-AOR-AUTO-bring-PST:TR
 31525 *ú-ŋu?*
 QU-be:FACT
 31526 ‘Was it for yourself that you brought the water?’
 31527 b. *azø c-tx-nu-ru-t-a ñu*
 1SG TRAL-AOR-AUTO-bring-PST:TR-1SG be:FACT
 31528 ‘I brought it for myself.’

31529 Given the fact that many periphrastic TAME categories use copulas (§21.2.2,
 31530 §21.5.1.8, §21.5.3.5, §21.6.2.1), there are many cases where this focalizing function

¹⁷These sentences are from a story where a child at school is bullied by another pupil, who forces him to bring water for him; the teacher (who guessed that the first child was being bullied) asks (186a) to have him tell the one who forced him to do it, but the bullied child replies (186a), as he fears reprisals.

31531 of the copula is ambiguous (for this reason, most of the examples presented below
 31532 involve verbs in Aorist and Inferential form, which do not occur with the copulas
 31533 in periphrastic tenses).

31534 The postverbal copula construction is used to indicate focus on all core arguments,
 31535 including intransitive subject (187), transitive subject (188, 189, with
 31536 optional ergative on the overt pronoun, §8.1.2) and object (190, 191).

31537 In (§186b), although the focalized argument is in transitive subject function, it
 31538 is not focalized as subject ('it is I who brought it') but as beneficiary ('it is for
 31539 myself that I brought it'), as this referent has both functions, the latter marked
 31540 by the autive prefix *nua-* (§19.1.3).

31541 All three copulas (§22.5.1.1) are found in this construction, including the em-
 31542 phatic affirmative *cti* (187, 190) and the negative *ma* (190, 192).

- 31543 (187) *tceri, u-pi mu-pjy-ryzi qʰendyre, u-las*
 LNK 3SG.POSS-elder.sibling NEG-IFR.IPFV-stay LNK 3SG.POSS-aunt
 31544 *nua pjy-ryzi cti qʰe*
 DEM NEG-IFR.IPFV-stay be.AFF:FACT LNK
 31545 'But his elder brother was not there, it was his brother's wife who was
 31546 there.' (140512 alibaba, 62)

- 31547 (188) *pynmawombyr kua [...] tʃ-wy-su-χtui-a ηu*
 ANTHR ERG AOR-INV-CAUS-sell-1SG be:FACT
 31548 'It is Padma 'Od'bar who sold it to me.' (2012 Norbzang, 157)

31549 Focalized first or second person core arguments, in addition to being marked
 31550 by an overt pronoun, are also obligatorily indexed on the verb (§14.2, §14.3), as
 31551 shown by 1sg and 2sg marking in (189) and (190) below and in (186) above.

- 31552 (189) *kuki tcʰeme ki ndyre azuy a-pu-ηu tṣaŋ ma*
 DEM.PROX girl DEM.PROX LNK 1SG.GEN IRR-IPFV-be.be.fair:FACT LNK
 31553 *tce azo pu-nu-mto-t-a cti tce*
 LNK 1SG AOR-AUTO-see-PST:TR-1SG be.AFF:FACT LNK
 31554 'This girl, it would be fair if she were mine, as it was I who found her.'
 31555 (140517 buaishuohua, 102)

- 31556 (190) *azo pynmawombyr tu-ti-a cti ma, nxj*
 1SG ANTHR IPFV-say-1SG be.AFF:FACT LNK 2SG
 31557 *nu-ta-nu-χkʰyŋga ma*
 IPFV-1→2-APPL-call not.be:FACT
 31558 'I am saying "Padma 'Od 'bar", it is not you that I am calling.' (2012
 31559 Norbzang, 163)

- 31560 (191) *k^bwayŋju ri pytca ni pui-ynwayro-ndzi tce, nua pui-nyre-a*
 window LOC bird DU SENS-play-DU LNK DEM IPFV-1SG
 31561 *cti wo*
 be.AFF:FACT SFP
 31562 ‘On the window two birds were playing, this is what I was laughing
 31563 about.’ (2014-kWLAG, 396)

31564 This construction is also attested to focalize adjuncts, such as the causal phrase
 31565 marked with the ergative (§8.2.2.5) in (192).

- 31566 (192) *nua u-ndza kua nua-si eo pui-maꝝ.*
 DEM 3SG.POSS-reason ERG AOR-die ADVERS PST.IPFV-not.be
 31567 ‘It was not because of this that shed died.’ (150907 srWn, 23)

31568 The postverbal copula can be nominalized, and the whole sentence turned
 31569 into a non-finite clause. This type of construction is also used for constituent
 31570 focalization as in (193). The form *kui-ŋu* is ambiguous between a stative infinitive
 31571 and a subject participle (§16.2.1.1), and therefore the non-finite clause is either
 31572 analyzable as an infinitival complement clause (§16.2.1.5) or a participial clause
 31573 in semi-object function (§24.4.1).

- 31574 (193) [*xciiri nua kua qapri buksi pŋy-sat kui-ŋu*] *nunuu ko-tso*
 weasel DEM ERG snake python IFR-kill SBJ:PCP-be DEM IFR-understand
 31575 ‘He realized that it was the weasel that had killed the python.’ (140518
 31576 xuezhe he huangshulang-zh, 34)

31577 22.5.4 Postverbal negative existential verb

31578 Like the negative copula *maꝝ* (§22.5.3.1), the negative existential verbs *me* and
 31579 *maje* occur postverbally as periphrastic negative construction (§13.2).

31580 With transitive verbs, this construction can express universal negative object
 31581 (‘nothing’), in particular with the adverbial intensifier *maka* (§22.2.4), which can
 31582 be located either before the main verb (194a) or directly before the negative exis-
 31583 tential verb (194b).

- 31584 (194) a. *maka zo pui-mto-t-a me*
 at.all EMPH AOR-see-PST:TR-1SG not.exist:FACT
 b. *pui-mto-t-a maka me*
 EMPH AOR-see-PST:TR-1SG at.all not.exist:FACT
 31586 ‘I did not see anything/any of it at all.’ (elicited)

With secundative verbs (§14.4.2), negative meaning can apply either to the object or to the theme (semi-object). In (195), the object (*rŋul* ‘silver’) is definite, while the non-overt theme (the manner) is universal negative.

- (195) *azo rŋgw* *cti-a* *qhe, rŋul ste-a* *me*
 1SG boulder be.AFF:FACT-1SG LNK silver do.like:FACT-1SG not.exist:FACT
qhe, nyzo ny-ŋgra *a-pw-ŋu tce ty-nu-ndym*
 LNK 2SG 2SG.POSS-salary IRR-PFV-be LNK IMP-AUTO-take[III]
 ‘I am a boulder, I have no use of (this) silver, may this be your reward
 (for helping me), take it.’ (divination, 98)

The postverbal negative construction can also indicate a non-specific, but not completely indefinite entity (‘not any X, none of the X’ rather than ‘nothing’). In (196), the zero object anaphorically refers to *qumdroy* ‘crane’ (§22.1.2.1), the main topic of the story from which this sentence is taken.

- (196) *tce jinde aj pw-mto-t-a* *me ri*,
 LNK nowadays 1SG AOR-see-PST:TR-1SG LNK not.exist:FACT
pw-kw-xtci tce púa-wy-mto
 AOR-GENR:S/O-be.small LNK AOR-INV-see
 ‘These days I have not seen any (crane), but I did see (some) when I was
 young.’ (22-qomndroN, 25)

The scope of the negation is however not necessarily restricted to the object. In (197) for instance, the non-overt object anaphorically refers to *jima* ‘maize’ mentioned in the previous sentences, but the scope of negation is rather on the essive participial clause *zara nu-ky-nu-ndza* ‘as food for themselves/for themselves to eat’ (§8.1.7): the villagers do plant maize, but for a different purpose.

- (197) *tce zara nu-ky-nu-ndza* *tce konyla ji-nu*
 LNK 3PL 2PL.POSS-OBJ:PCP-AUTO-eat LNK completely plant:FACT-PL
maje woma
 not.exist:SENS SFP
 ‘They don’t plant any (maize) for themselves to eat, (they plant it to feed
 their pigs).’ (140522 kAmYW tWji, 68)

With intransitive verbs, this construction is used to indicate the complete absence of the action ‘not ... at all’ (198).

- 31613 (198) *tuu-ci wu-rkuu zuu ku-ryzi-a tce nure ri*
 INDEF.POSS-water 3SG.POSS-side LOC IPFV-stay-1SG LNK DEM:LOC LOC
 31614 *ku-nuu-ts^hi-a cti ma w-ηguu ri*
 IPFV-AUTO-drink-1SG be.AFF:FACT LNK 3SG.POSS-in also
 31615 *k^h-ari-a me, c-tu-n^hηku^hke-a ri*
 AOR:EAST-go[II]-1SG not.exist:FACT TRAL-IPFV-DISTR:walk-1SG also
 31616 *me*
 not.exist:FACT
 31617 ‘I am staying near the water and drinking (water) there, I did not go into
 31618 the water at all, I am not walking around in it.’ (aesop lang he yang 16-17)

31619 The intransitive stative verb *sna* ‘be good, be worthy’ (§19.7.10) is commonly
 31620 used with negative existential verbs, with the meaning ‘not good for anything’,
 31621 as in (199). The scope of universal negation in this case is on the essive adjunct
 31622 (for instance *nua^ha wu-ndza* ‘cow fodder’ in the first clause of 199).

- 31623 (199) *nua^ha wu-ndza sna ma nui ma sna*
 cow 3SG.POSS-food be.good:FACT LNK DEM apart.from be.good:FACT
 31624 *me*
 not.exist:FACT
 31625 ‘(Oat) is good as fodder for cattle, but apart from that it is not good for
 31626 anything.’ (08-qajAGi, 8)

31627 The clause preceding the negative existential verb can be embedded within
 31628 a participial clause with the existential verb *kui-tu*, as in (200). A similar use of
 31629 *kui-tu* is also found in the possessive construction (example 177, §22.5.2).

- 31630 (200) *[[azo joβ tci c-tx-nuu-tut-a] kui-tu]*
 1SG INTERJ also TRAL-AOR-AUTO-say[II]-1SG SBJ:PCP-exist
 31631 *me q^he [azo ndyre nuw-yβzu-a ri*
 not.exist:FACT LNK 1SG ADVERS IPFV-become-1SG also
 31632 *kui-ra] me q^he, ny-rcu^h~rca*
 SBJ:PCP-be.needed not.exist:FACT LNK 2SG.POSS-EMPH~together.with
 31633 *zo yi-a ηu ma nui ma [[azuuy*
 EMPH come:FACT-1SG be:FACT LNK DEM apart.from 1SG:GEN
 31634 *kui-ra] kui-tu] me*
 SBJ:PCP-be.needed SBJ:PCP-exist not.exist:FACT
 31635 ‘I did not go and heed (the girl who was calling us), and I don’t need to
 31636 become anything special, I don’t need anything, apart from following
 31637 you.’ (2003 kandZislama, 36-38)

31638 The postverbal negative existential verb can be combined with a verb taking
 31639 the negative prefix, forming a double negation (§13.3) expressing universal quan-
 31640 tification (201).

- 31641 (201) *kui-ŋyn* *mx-nyma-ndzi* *maka me*
 SBJ:PCP-be.evil NEG-do:FACT-DU at.all not.exist:FACT
 31642 ‘There is no evil thing that they do not do/They do all kinds of evil
 31643 things.’ (140428 yonggan de xiaocafeng-zh, 175)

31644 In addition, postverbal negative existential verbs are used in one of the superla-
 31645 tive constructions (§26.4.3). (§16.2.2.2)

31646 22.5.5 Verb doubling

31647 Copulas are exceptional in being the only verbs that can be repeated to express
 31648 emphasis. This usage is only found in the traditional story register, as in (202).
 31649 This construction differs from partial reduplication, which only targets one syllable
 31650 (§4.1).

- 31651 (202) *nui kui-fse* *ci* *tui-ŋu*, *nui mx-kui-naŋtcuwy*
 DEM SBJ:PCP-be.like INDEF 2-be:FACT DEM NEG-SBJ:PCP-be.the.same
 31652 *ci* *tui-ŋu* *tui-ŋu*
 INDEF 2-be:FACT 2-be:FACT
 31653 ‘You are (someone) like that, you are different (from normal people).’
 31654 (2011-04-smanmi, 47)

31655 22.5.6 Other constructions

31656 Apart from the constructions discussed above, existential verbs are attested in
 31657 an unusual type of alternative concessive conditional (§25.2.3.2), combined with
 31658 the bare stem of the verb (§16.2.2.2).

31659 Existential verbs can also occur with the adverb *jamar* ‘about’ to build an equa-
 31660 tive construction ‘as big as X’ (§26.3.1.4) as in (203).

- 31661 (203) *ki* *azo a-jas* *ki* *jamar yŋzu.*
 DEM.PROX 1SG.POSS-hand DEM.PROX about exist:SENS
 31662 ‘The wild yak horn is about as big as my hand here.’ (20-RmbroN, 28)

23 Relative clauses

23.1 Introduction

This chapter, building on previous work by Sun (2006a); Sun & Lin (2007) on Tshobdun and Situ, and on Jacques (2016d) on Japhug, presents an overview of relativizing constructions in Japhug.

Three different ways of classifying relative clauses are outlined, respectively based on the form of the verb and the structure of the clause (§23.2), on the position of the relativized element (§23.4) and on its function in the relative clause (§23.5).

Various morphosyntactic phenomena specific to relative clauses (including resumptive pronouns, case marking etc) are discussed in §23.3, and some potential ambiguities between relative and complement clauses are analyzed in §23.8.

Two sections are devoted to the functions of relative clauses other than noun modification: focalization (using pseudo-clefts, §23.6.1) and quantification (universal quantification and expression of indefiniteness, §23.7).

Since an important proportion of relative clauses in Japhug are participial clauses, section §16.1 in a previous chapter partially overlaps with some of the sections of this chapter.

23.2 Subtypes of relative clauses

23.2.1 Participial relative clauses

Participles (§16.1) are the main way of building relative clauses in Japhug. Three types of participles are found: subject *kui-* (§16.1.1), object *ky-* (§16.1.2) and oblique *sy-/z-* (§16.1.3).

The subject participle (§16.1.4) is the only available strategy to relativize subjects (whether from intransitive §23.5.1 or transitive verbs §23.5.2) and possessor of subjects (§23.5.10.1).

The object participle, mainly used to relativize objects and semi-objects (§16.1.2.4), competes in this function with finite relative clauses (§23.5.3, §23.5.4). It can also

31691 marginally relativize locative arguments (§16.1.2.5, §23.5.5) and possessor of ob-
 31692 jects (§23.5.10.2). Unprefixed object participles in *kx-* are not easily distinguish-
 31693 able from subject participles of passive forms *kua-x-*, due to vowel contraction
 31694 (§16.1.2.3).

31695 The oblique participle can relativize many non-core functions, including loca-
 31696 tive adjuncts (§16.1.3.5), instruments (§16.1.3.6) and other adjuncts (§16.1.3.7), and
 31697 compete in these functions with prenominal finite relatives (§23.5.5, §23.5.9).

31698 Since participial relative clauses are described in detail in chapter 16, the reader
 31699 is referred to the relevant sections in that chapter for a focused discussion.

31700 23.2.2 Finite relative clauses

31701 Some relative clauses in Japhug have a verb in finite form, with person indexation
 31702 and TAME marking. For instance, the verb *puu-mto-t-a* in 1SG→3 (§14.3.2.1) Aorist
 31703 form of the headless relative clause in (1) could stand on its own as a complete
 31704 sentence meaning ‘I saw/have seen it’. The only clue that this appositive clause
 31705 is a relative is the presence of the determiner *nua*, whose status in this context is
 31706 discussed in §23.3.5.2.

- 31707 (1) *ma uzo ui-mdor nuanua, [aj puu-mto-t-a] nua,*
 LNK 3SG 3SG.POSS-colour DEM 1SG AOR-see-PST:TR-1SG DEM
 31708 ‘The colour of (wolf’s fur), (the ones) that I have seen.’ (27-spjaNkW, 21)

31709 Finite relative clauses are not however completely identical to the correspon-
 31710 ding independent clauses, even when the head is internal (§23.4.3). Four main
 31711 morphosyntactic differences can be observed.

31712 First, the verb of finite relative clauses can be subjected to totalitative redu-
 31713 plication (§23.3.2), a morphological category that is restricted to relative clauses,
 31714 and not found in main clauses or other types of complement clauses.

31715 Second, possessor prefixes in finite relative clause can undergo possessor neu-
 31716 tralization (§23.3.4).

31717 Third, some TAME categories are not allowed in relative clauses, including
 31718 Modal categories such as Irrealis (§21.4.1) and Imperative (§21.4.2) and Evidential
 31719 categories such as Inferential (§21.5.2), Sensory (§21.3.2) and Egophoric Present
 31720 (§21.3.3). The TAME categories attested in finite relatives are Imperfective (§21.2),
 31721 Factual Non-Past (§21.3.1), Aorist (§21.5.1, as in 1 above) and Past Imperfective
 31722 (§21.5.3).

31723 Fourth, there are restrictions on person indexation in some finite relative clau-
 31724 ses: monotransitive verbs are only found in third person object direct forms

31725 (§23.5.3.1), inverse and local person forms being only found in relatives with di-
31726 transitive verbs.

31727 Finite relative clauses are not compatible with subject relativization, but they
31728 can be used when relativizing objects (§23.5.3), semi-objects (§23.5.4), possessors
31729 of objects (§23.5.10.2), goals (§23.5.5.1), objects embedded in object complement
31730 clauses (§23.5.11.3) and some time adjuncts (§23.5.9).

31731 23.2.3 Genitival relative

31732 Both participial and finite prenominal relatives (§23.4.2) are attested with a gen-
31733 itive marker *yuu* (§8.2.3.3) before the head noun, which generally does not take
31734 a possessive prefix in this construction. This type of construction is common in
31735 texts translated from Chinese, and is certainly due to calquing from Chinese in
31736 many cases, for instance in (2).

- 31737 (2) [u₂zo ku-ryzi] yuu si u-pa nutcu jy-azyut-nuu
 3SG IPFV-stay GEN tree 3SG.POSS-down DEM:LOC AOR-arrive-PL
31738 ‘They arrived at the bottom of the tree where he was staying.’ (140512
31739 alibaba-zh, 22)

31740 A similar tendency to calque Chinese relative constructions with the genitive
31741 is observed in other Gyalrongic languages (Lai 2018). For this reason, examples
31742 of genitival relative clauses from translated stories will not be taken into account
31743 in this chapter.

31744 In non-translated texts and in conversations, prenominal genitival clauses are
31745 also marginally attested to relativize core arguments, as in (3), though this is un-
31746 common. Finite prenominal genitival clauses are however often used for locative
31747 and temporal adjunct relativization (§23.5.5.1).

- 31748 (3) [tu-çyrui yuu sm..., u-kui-nuismyn] yuu
 INDEF.POSS-bone GEN incomplete word 3SG.POSS-SBJ:PCP-treat GEN
31749 smynba yu.
 doctor be:FACT
31750 ‘It is a (type of) doctor who treats bone (fractures).’ (140426 laxthab, 34)

31751 This construction should not be confused with complement-taking nouns (§5.1.2.6),
31752 and with true genitival constructions with a headless relative clause possessor,
31753 as in (4), where the noun following the genitive (*tuu-ryja* ‘one’s face’) is not an
31754 argument of the relative clause.

23 Relative clauses

- 31755 (4) [nuu-kuu-yywu] yuu tur-rya nuu tsa nuu-fse tce
IPFV-SBJ:PCP-cry GEN GENR.POSS-face DEM a.little SENS-be.like LNK
31756 ‘It looks a bit like the face of someone crying.’ (18-qromJoR, 103)

31757 23.2.4 Relator nouns

31758 Some prenominal relatives (§23.4.2) have semantically bleached head nouns, which
31759 are in the process of becoming grammaticalized as relativizers: *uu-stu* ‘place’, *uu-sta*
31760 ‘place’ and *uu-spa* ‘material’. These three nouns are fossilized oblique participles
31761 (Table 16.4, §16.1.3.10). The former two are used to relativize locative adjuncts,
31762 more exceptionally goals (§23.5.5.3), while *uu-spa* ‘material’ serves to build instrument
31763 (§23.5.6) and in some cases object relative clauses.

31764 The noun *uu-spa* still preserves its original meaning in examples such as (5),
31765 from which its other uses derive.

- 31766 (5) tuu-jas ue nuu kuu [ky-cp^hyt] uu-spa nuu
GENR.POSS-hand left DEM ERG OBJ:PCP-patch 3SG.POSS-material DEM
31767 pjúu-wy-suu-st^hor nyu
IPFV-INV-CAUS-press be:FACT
31768 ‘One presses with the left hand on the piece of cloth that is to be patched.’
31769 (12-kAtsxWb, 37)

31770 From the purposive object relative meaning ‘(material) that is to be Xed’ as in
31771 (5), an instrumental interpretation ‘(material) that is used to X’ arose: example (6)
31772 illustrates the semantic proximity between oblique instrumental relative clauses
31773 (§16.1.3.6) and the *uu-spa* clauses. Purposive clauses in *uu-spa* (§25.5.4) also derive
31774 from this type of constructions.

- 31775 (6) [pas uu-sy-χsu] nyu, [pas ky-mbi] uu-spa
pig 3SG.POSS-OBL:PCP-feed be:FACT pig OBJ:PCP-give 3SG.POSS-material
31776 nyu
be:FACT
31777 ‘It is pig fodder, it is (something (that can) be given to pigs.’ (150822 laoye
31778 zuoshi zongshi duide-zh, 173)

31779 The relator nouns differ from other nouns serving as heads of relative clause
31780 in that they can occur even when an overt non-generic head noun is present,
31781 such as *k^huna* ‘dog’ in (7) and *kuspoz* ‘hole’ in (8).

- 31782 (7) *tyrbabkci nuu icq^ha, kur-yyrbab, [ky-tsum]*
 hunting.dog DEM FILLER SBJ:PCP-hunt OBJ:PCP-take.away
 31783 *w-spa k^htuna nuu juu-ŋu.*
 3SG.POSS-material dog DEM SENS-be
 'Hunting dogs are dogs that are taken to hunt.' (140426 liegou he
 31785 zhonggou-zh, 1)
- 31786 (8) *[βzui u-sy-yi] w-stu kuispor nutcu,*
 mouse 3SG.POSS-OBL:PCP-come 3SG.POSS-place hole DEM:LOC
 31787 *icq^ha numui z-nuu-rku-nuu.*
 the.aforementioned DEM TRAL-IPFV-put.in-PL
 'People put it (the flower of the burdock) in the holes from which mice
 31789 come (as a trap).' (13-tCamu, 78)

31790 These examples are very rare, and not unproblematic¹ but nevertheless suggest
 31791 that *w-spa*, *w-stu* and *w-sta* are advancing in the grammaticalization cline. In the
 31792 closely related language Khroskyabs (Lai 2017: 580), the clitic =*spi*, exact cognate
 31793 of *w-spa* (Table 16.4, §16.1.3.10), has become the main object relativizer.²

31794 23.2.5 Interrogative pronouns and correlative constructions

31795 All interrogative pronouns, including *tç^hi* 'what' (§6.5.1), *çuu* 'who' (§6.5.2), *ŋotçeu*
 31796 'where' (§6.5.4) and *t^hvjçeu* 'when' (§6.5.3), can be used in correlative relative con-
 31797 structions as free-choice indefinites 'whoever/whatever/whenever' (§6.6.6). The
 31798 pronoun can occur on its own or in apposition with an overt head noun as in (9).

- 31799 (9) *wzo kuu [<cai> tç^hi ta-ndza] nuu yuu u-mdor nuu*
 31800 3SG ERG vegetable what AOR:3→3'-eat DEM GEN 3SG.POSS-colour DEM
juu-ndym juu-ŋu.
 31801 IPFV-take[III] SENS-be
 'It bears the colour of whatever vegetable it has eaten.' (25-caiqajW, 22)

31802 When a postclausal relator noun head (§23.4.2, §23.5.5.3) is present as in (10),
 31803 the interrogative pronoun remains *in situ*.

¹It could be alternatively possible to analyze *kui-spor* as a subject participle (Table 16.2, §16.1.1.7), and argue that *w-stu kui-spor* is a participial relative 'the place that has a hole'.

²The clitic =*spi* has a function that is still close to that of *w-spa* in examples such as (6): Lai (2017: 514) explains that it refers to 'un objet spécifiquement destiné à subir l'action.'

23 Relative clauses

- 31804 (10) [ŋotcu jv-kuu-yr] *w-stu* *nwtcu* *ku-mvraβ*
 where AOR-SBJ:PCP-go[II] 3SG.POSS-place DEM:LOC SBJ:PCP-marry
 31805 *ku-ce* *ra* *tu-ti-nuu* *ŋgrvl.*
 GENR:S/O-go:FACT be.needed:FACT IPFV-say-PL be.usually.the.case:FACT
 31806 ‘People say that whatever place (the ladybug) flies to, one has to go to get
 31807 married there.’ (26-kWlAGpopo, 42)

31808 Correlative relatives can be participial (10, 11) or finite (9), depending on the
 31809 function of the relativized element (§23.5).

- 31810 (11) [*w-jas* *tc^hi* *nau-kuu-ye* *zo*] *tu-ndze*
 3SG.POSS-hand what AOR:WEST-SBJ:PCP-come[II] EMPH IPFV-eat[III]
 31811 ‘It eats whatever it can get its hands on.’ (28-qapar, 12)

31812 In (12), the fact that the interrogative pronoun *cuu* ‘who’ takes the ergative
 31813 shows that it belongs to the same clause as the transitive verb *lu-ky-tçrt*, as the
 31814 matrix verb *c^ha* ‘can’ is intransitive (§14.2.3): it is therefore embedded within the
 31815 complement clause.

- 31816 (12) [[*cuu* *kua* [*kua-murkua kua-ŋu*] *lu-ky-tçrt*] *pua-kua-c^ha*] *nua*,
 who ERG SBJ:PCP-steal SBJ:PCP-be IPFV-INF-take.out AOR-SBJ:PCP-can DEM
 31817 *a-sci* *rjylpu c^hua-ta-suu-ndo-nua* *ŋu*
 1SG.POSS-instead king IPFV-1→2-CAUS-take-PL be:FACT
 31818 ‘Whoever succeeds in catching the one who is the thief, I will make him
 31819 the king in my stead.’ (2003 qachGA, 5)

31820 Possessors of subjects (§23.5.10.1) can also undergo correlative maximalizing
 31821 relativization, as in (§23.5.10.1).

- 31822 (13) [*cuu* *w-tui-ji* *kua-nvtauy*] *numura kua*
 who 3SG.POSS-INDEF.POSS-field SBJ:PCP-happen.to.be DEM:PL ERG
 31823 *tr-mt^hum* *ku-sqa-nua* *tce*,
 INDEF.POSS-meat IPFV-cook-PL LNK
 31824 ‘Whoever_i (it is) whose_i fields happen to be (those that are ploughed by
 31825 the whole village_j), those people_i cook meat (for the village_j).’ (150909
 31826 kWnWjlAmtshi, 17)

31827 Correlative relatives have commonalities with universal concessive conditionals (§25.2.3.3), but in the latter the subordinate clause and the main clause do
 31828 not necessarily share a common element.

31830 23.3 Morphosyntactic specificities of relative clauses

31831 This section presents morphosyntactic phenomena distinguishing relative clau-
 31832 ses from independent sentences or complement clauses, including resumptive
 31833 pronouns (§23.3.1), case marking (§23.3.3), possessive prefix neutralization (§23.3.4),
 31834 determiner replication (§23.3.5) and totalitative reduplication (§23.3.2).

31835 It also shows that the demonstrative-like elements *n̩u* that follow the relatives
 31836 are not complementizers (§23.3.5.2), and discusses word order within the relative,
 31837 in particular the presence of postverbal elements in head-internal relative clauses
 31838 (§23.3.6).

31839 23.3.1 Resumptive pronouns

31840 A resumptive third person pronoun *w̩zo* occurs in conjoined relative clauses with
 31841 the correlative additive focus marker *ri* (§9.1.6.2). It is obligatory in this construc-
 31842 tion when the relativized element is the intransitive subject, as in the clause *w̩zo_i*
 31843 *ri kui-sna* in (14).

- 31844 (14) *n̩un̩u [w̩i-p^hu r̩i kui-wxti] [w̩zo_i ri kui-sna]*
 DEM 3SG.POSS-price also SBJ:PCP-be.big 3SG also SBJ:PCP-be.good
 31845 *ŋu*
 be:FACT
 31846 '(Silver) is (a metal) that is both expensive (whose price is big) and nice
 31847 (30-Com, 139)

31848 This construction occurs in particular in texts from Chinese to translate the
 31849 construction 又……又…… <yòu X yòu Y> 'both X and Y', as in (15).³

- 31850 (15) *n̩un̩u qajui kui-syjlui-jlob n̩u jo-yi tce, [w̩zo ri*
 DEM bug SBJ:PCP-EMPH~disgusting DEM IFR-come LNK 3SG also
 31851 *kui-wxti], [w̩zo ri kui-syjlui-jlob] ci pjx-ŋu.*
 SBJ:PCP-be.big 3SG also SBJ:PCP-EMPH~be.disgusting INDEF IFR.IPFV-be
 31852 'The disgusting creature (the toad) came, it was big and disgusting.'
 31853 (150818 muzhi guniang-zh, 85-86)

³The Chinese original has 这只癞蛤蟆又大又丑 <zhè zhī làiháma yòu dà yòu chōu> 'the toad was big and ugly'.

23.3.2 Totalitative reduplication

The main verb of relative clauses, whether in participial (18) or in finite form (16, 17), can undergo reduplication of the first syllable (§12.4.1) to express universal quantification of the relativized element, whose syntactic function can be object (16), semi-object (17) or intransitive subject (18), and even transitive subject (19) (however some transitive subject participle cannot undergo initial reduplication for morphological reasons, see §12.4.1.5).

- (16) [t₁*uu*-ry_i p₁*uu*-pa-y₁ut-nd₁zi] ₂*zo*] n₁unu
 INDEF.POSS-seed TOTAL~AOR:3→3':DOWN-bring-DU EMPH DEM
 lo-ji-nd₁zi.
 IFR-plant-DU
 'They planted all the seeds that they had brought (down from heaven).' (31-deluge, 147)

- (17) [a₁zo t₁u~t₂x-f₁se-a] n₁uu t₂x-f₁se t₂c₁e
 1SG TOTAL~AOR-be.like-1SG DEM IMP-be.like LNK
 'Do everything like me.' (140426 jiagou he lang-zh,18)

- (18) <zhengfu> k₁uu [k₁uu~k₂uu-n₁go], n₁unu
 government ERG TOTAL~SBJ:PCP-be.sick DEM
 [k₂uu~ky₁-k₂uu-ny₁ndza] ₂*zo*] n₁uu, andi comuco t₁cetu t₂a₁s
 TOTAL~AOR-SBJ:PCP-have.leprosy EMPH DEM west TOPO up.there up
 ri, n₁uki t₁s^hupa ci tu t₂c₁e, unture to-su-ywurwum.
 LOC FILLER village INDEF exist:FACT LNK DEM:LOC IFR-CAUS-gather
 'In the west up there in Kyomkyo there is a village. The government gathered all the sick people, all the lepers there.' (25-khArWm, 64-66)

- (19) t₁c₁e n₁u₁ra qarts^haz mu n₁u₁ra, [p₁ur~p₁uu-k₁uu-mts^hy₁m] n₁uu
 LNK DEM:PL deer female DEM:PL TOTAL~AOR-SBJ:PCP-hear DEM
 u₁u-rk₁uu n₁u₁t₁c₁tu tu-owurwum-n₁uu y₁u
 3SG.POSS-side DEM:LOC IPFV-gather-PL
 'All the does that have heard (the deer) gather around it.' (27-qartshAz, 133-134)

Although initial reduplication occurs with finite verb forms in main clauses with various meanings (§12.4.1), totalitative reduplication is exclusively attested in relative clauses. A more detailed discussion of this phenomenon is provided in §12.4.1.5.

31880 Totalitative reduplication is specificity to relative clauses, and does not occur
 31881 in complement clauses. It can be used as a test to distinguish between the two
 31882 types of clauses in ambiguous cases (§23.8).

31883 23.3.3 Genitive possessor

31884 In object relative clauses (§23.5.3), transitive subjects can sometimes be marked
 31885 by the genitive instead of the ergative, in particular when the agent can be con-
 31886 strued as a possessor of the object, as in the finite headless relative in (20).

- 31887 (20) *azuy* [nu-nu-βde-t-a] *nui* *úr-ŋu*
 1SG:GEN AOR-AUTO-throw-PST:TR-1SG DEM QU-be:FACT
 31888 ‘Is it the one that I have lost?’ (140427 bianfu jingji he shuiniao-zh, 30)

31889 Example (21) illustrates the hesitation between the ergative in the first rela-
 31890 tive clause, and the genitive in the second one (where the agent is the *former*
 31891 possessor of the object).

- 31892 (21) *tce* [*atu tumukyrŋi kui u-jab* *nui-ky-kʰo*] *nui*,
 LNK up.there heavenly(god) ERG 3SG.POSS-hand AOR-OBJ:PCP-give DEM
 31893 *smynmimitoŋ numuŋ yuŋ* [*nui-ky-kʰo*] *numuŋ*, *ko-ctʰuz*
 ANTHR DEM GEN AOR-OBJ:PCP-give DEM IFR:EAST-turn.towards
 31894 ‘He turned (the magical object) that the god from heaven had given him,
 31895 that Smanmi Metog had given him, (towards the direction of the
 31896 râkshâsas).’ (2011-04-smanmi, 110)

31897 In the case of participial object relatives with a possessive prefix, the transitive
 31898 subject/possessor does not require genitive marking, just in the same way as
 31899 possessive prefixes on the possesum (with optional genitive) are sufficient to
 31900 mark possession between two nouns (§5.1.1.2, §8.2.3.1). In (22) for instance, the
 31901 pronoun *uzo* ‘it’ (the camel) directly precedes the participle *u-ky-tsʰi* ‘the (water)
 31902 that it drinks’ without either ergative or genitive marker.

- 31903 (22) *u-zgo* *u-ŋgu* *nutcu* *uzo* [*u-ky-tsʰi*]
 3SG.POSS-mountain 3SG.POSS-inside DEM:LOC 3SG 3SG.POSS-OBJ:PCP-drink
 31904 *tu-nui-rke* *nui-kʰui*
 IPFV-AUTO-put.in[III] SENS-be.possible
 31905 ‘(The camel) can keep the (water) that it drinks in its hump.’ (19-rNamoN,
 31906 54)

23 Relative clauses

31907 The transitive subject in these constructions is formally a possessor, external
31908 to the relative clause. In (23) in particular, the presence of the degree adverb *stu*
31909 ‘most’ (§26.4.1) between the pronoun *uzo* and the head noun *u-sytc^ha* ‘its place’
31910 is a clue that *uzo* is not included in the relative clause.

- 31911 (23) *tceri uzo [stu u-sytc^ha u-k_y-nuu-rga] nuu,*
31912 LNK 3SG most 3SG.POSS-place 3SG.POSS-OBJ:PCP-APPL-like DEM
‘The place that it likes most...’ (20-xsar 10)

31913 23.3.4 Possessive prefix neutralization

31914 In relative clauses, the possessor of inalienably possessed nouns can be neutral-
31915 ized to the indefinite possessor prefix *tu-*/*tr-* (§5.1.3), even when the possessor
31916 is definite. In (24) for example, the possessor of *-ŋga* ‘clothes’ is the transitive
31917 subject of both sentences (the main character of the story), and is marked with
31918 the 3SG prefix *u-* in the first sentence. In the second sentence, the noun *-ŋga* is lo-
31919 cated in a head-internal relative clause (§23.5.4), and even though the possessor
31920 is the same as in the previous sentence, the indefinite prefix *tu-* appears.

- 31921 (24) *tcendyre u-ŋga ra jy-tcxt tce icq^ha, [rgynmuu kuu*
31922 LNK 3SG.POSS-clothes PL IFR-take.off LNK FILLER old.woman ERG
31923 ***tu-ŋga*** *nuu-k_y-mbi]* *nuura jy-tcxt tce*
31924 INDEF.POSS-clothes AOR-OBJ:PCP-give DEM:PL IFR-take.off LNK
‘He took off his clothes, he took off the (magical) clothes that the old
woman had given him.’ (140508 shier ge tiaowu de gongzhu-zh, 172-173)

31925 Some inalienably possessed nouns have constraints on the syntactic function
31926 of the referent indexed by the possessive prefix (§5.1.2.13). In particular, *tr-pyro*
31927 ‘present’ indexes the agent (the person giving the present) as possessor, never
31928 the recipient, as shown by (25), where a 2SG *ny-pyro* or an indefinite possessor
31929 *tr-pyro* would be ungrammatical (see also examples 46 and 47 in §5.1.2.13).

- 31930 (25) *a-pyro jnu-ta-mbi nyu*
31931 1SG.POSS-present IPFV-1→2-give be:FACT
‘I give it to you as a present.’ (elicited)

31932 In relative clauses (whether participial or finite ones), it is possible to index
31933 the agent like in main clauses (26), but possessor neutralization is also possible,
31934 as in (27).

- 31935 (26) [a-p_{yro} *nua-mbi-t-a*] *nua a-rfit* *ŋu*
 1SG.POSS-present AOR-give-PST:TR-1SG DEM 1SG.POSS-child be:FACT
 31936 ‘The one to whom I gave a present is my child.’ (elicited)
- 31937 (27) [*ty-p_{yro}* *nua-mbi-t-a*] *ty-rfit* *nua*
 INDEF.POSS-present AOR-give-PST:TR-1SG INDEF.POSS-child DEM
 31938 *a-tcu* *ŋu*
 1SG.POSS-son be:FACT
 31939 ‘The child to whom I gave a present is my son.’ (Elicited)

31940 Relative clauses are not the only syntactic contexts where possessor neutraliza-
 31941 tion is attested: it also occurs when inalienably possessed nouns take prenominal
 31942 modifiers (§5.1.4).

31943 23.3.5 Determiners

31944 23.3.5.1 Determiners on internal head

31945 In head-internal and postnominal relatives, postnominal determiners such as the
 31946 indefinite marker *ci* (§9.1.4.1) or the demonstrative *nua* (§9.1.5.4) can appear both
 31947 on the internal head noun and repeated following the relative clause. In (28) for
 31948 instance, *ci* occurs after the noun *rjylpu* ‘king’ and at the end of the relative after
 31949 the participle *kua-ŋyn* ‘(the one) who is evil’.

- 31950 (28) [*wuma zo rjylpu ci kua-ŋyn*] *ci p_y-tu tce*,
 really EMPH king INDEF SBJ:PCP-be.evil INDEF IFR.IPFV-exist LNK
 31951 ‘There was a very evil king.’ (140511 1001 yinzi-zh, 9)

31952 In (29), the indefinite *ci* is also repeated after the head noun *kuspor* ‘hole’ (a
 31953 lexicalized participle, §16.1.1.7) and following the participle *syz-nua-łor* ‘through
 31954 which (the smoke) comes out’ (with locative §16.1.3.5 or instrumental §23.5.6 rela-
 31955 tivizing function). In this case the relative can be analyzed as either postnominal
 31956 or head-internal.

- 31957 (29) [*kua-spor ci ty-k^hu sz-yz-nua-łor*]
 SBJ:PCP-have.a.hole INDEF INDEF.POSS-smoke OBL:PCP-AUTO-come.out
 31958 *ci nua-βze*
 INDEF IPFV-make[III]
 31959 ‘(The potter) makes a hole through which the smoke comes out.’
 31960 (30-kWrAfcAr, 32)

23 Relative clauses

31961 Determiner repetition is also found with relativized transitive subjects marked
31962 with the ergative (see 44 in §23.4.3.2).

31963 Examples like (28) and (29) are however relatively rare, in most cases the de-
31964 terminer either follows the relative (see for example 53 in §23.5.1) or the head
31965 noun (30)

- 31966 (30) [pyytci kui-mpci~mpyr zo] jy-ye
31967 bird INDEF SBJ:PCP-EMPH~be.beautiful EMPH AOR-come[II]
'A beautiful bird came.' (2003qachga, 14)

31968 In the case of prenominal relatives, the determiner *ci* can be found between
31969 the head noun and the relative clause, as in (31). This usage is not to be confused
31970 with that of prenominal *ci* (§9.1.7).

- 31971 (31) tce [nuu kui-fse] ci qajci yyzu.
31972 LNK DEM SBJ:PCP-be.like INDEF bug exist:SENS
31973 'There is a bug (invertebrate animal) that is like that.' (hist180421 haixing,
46)

23.3.5.2 Determiner or complementizer

31975 An important proportion of relative clauses are followed by the forms *nuu* and
31976 *nunuu*, whose functions in other contexts include distal demonstrative pronouns
31977 (§6.9), demonstrative determiners (§9.1.2) or topic markers (§9.1.5.4, §9.1.4.3), and
31978 *ra* (and *nura*), a plural marker (§9.1.1.2). In the case of finite relative clauses
31979 (§23.2.2), whose main verb generally has the same form as that of the corre-
31980 sponding independent sentence (in 32 for instance), the presence of these words
31981 may be the only clue that the clause is a relative.

- 31982 (32) [izo ndyre puu-χsu-j] nuu, tuu-rdobi tc^{hi} muu-puu-nnuu-pe
31983 1PL LNK AOR-feed-1PL DEM one-piece what NEG-PST.IPFV-AUTO-be.good
31984 my-xsi ma numuu nufse pju-si
31985 NEG-GENR:know LNK DEM like.that IFR-die
'Of the (tortoises) that we raised, one (of them) died just like that, I don't
know what went wrong.' (140510 wugui, 53)

31986 Given the fact that many languages have complementizers, including relative
31987 pronouns, which are homophonous with (and historically related to) demonstra-
31988 tives (for instance 'that' in English), it is legitimate to wonder whether such an
31989 analysis is possible for the *nuu* or *nura* that follow relative clauses.

23.3 Morphosyntactic specificities of relative clauses

31990 However, in prenominal relatives such as (33), *nuu* is located *after* the head
 31991 noun, for instance *çku* ‘Allium’ in (33), never before it. If it were a subordinator,
 31992 one would expect *nuu* to be located between the head noun and the relative.

- 31993 (33) *tce [azo a-kx-suuz] çku nuu nura ñu*
 LNK 1SG 1SG.POSS-OBJ:PCP-know Allium DEM DEM:PL be:FACT
 31994 ‘These are the (plants belonging to the gender) *Allium* that I know about.’
 31995 (07-Cku, 165)

31996 Another clue that *nuu*, *nunu* and *nura* in this context are better analyzed as
 31997 demonstrative determiners (§9.1.2, with or without topicalizing function, §9.1.5.4,
 31998 §9.1.4.3) is that relative clauses can take circumposed demonstratives (exactly like
 31999 circumnominal demonstratives, §9.1.2), as shown by the pre- and post-clausal
 32000 *nunu* in (34).

- 32001 (34) *nunu [pyyrnor kx-ti] nunua tñjmyy tyrcä ñuu-ñu*
 DEM fungus.sp OBJ:PCP-say DEM mushroom together SENS-be
 32002 *uñmy-kuu-ñu-ci ma*
 PROB-PEG-be-PEG LNK
 32003 ‘That (thing that) is called *pyyrnor* is probably (to be classified) among the
 32004 fungi.’ (22-BlamajmAG, 140)

32005 23.3.6 Postverbal elements

32006 Although Japhug is a strict verb-final language, some words can appear post-
 32007 verbally in independent sentences, including sentence-final particles (§10.2.1),
 32008 ideophones (§10.1.1) and some adverbs (§22.2.7).

32009 Relative clauses never take sentence-final particles (unlike some complement
 32010 clauses, §24.2.5.1), but some postverbal elements are nevertheless possible.

32011 First, the adverb *tsa* ‘a little’ can occur postverbally with a semantic scope
 32012 clearly restricted to the relative clause, as in (35)

- 32013 (35) *[nuu-luuz t^huu-kuu-ye tsa] nura tce, uðurjyt*
 3PL.POSS-age AOR-SBJ:PCP-come[II] a.little DEM:PL LNK TOPO
 32014 *uñ-skrt tu-βze-a ñuu-tso-nuu,*
 3SG.POSS-language IPFV-make[II]-1SG SENS-understand-PL
 32015 ‘Those who are a little older, they understand when I speak the (Japhug)
 32016 language of Gdongbrgyad. (150901 tshuBdWnskAt, 11)

32017 Ideophones are very commonly postverbal even in relative clauses, as in (36),
 32018 though mainly with stative verbs in subject participle form.

23 Relative clauses

- 32019 (36) *tce nuu u-βri w-taʂ nura qandzi*
 LNK 3SG.POSS-body 3SG.POSS-TOP DEM:PL be.dark:FACT SBJ:PCP-be.like
 32020 *kuu-fse, ayryyrum kuu-fse ma [kuu-wyrur~wyrum zo*
 be.whitish:FACT SBJ:PCP-be.like LNK LNK SBJ:PCP-emph-be.white EMPH
 32021 *sunṣtan] mas*
 IDPH(II):pure.white not.be:FACT
 32022 ‘The top part (of the mushroom called *kuyrummṛ* ‘white mushroom’) is
 32023 dark, whitish, it is not pure white.’ (21-kuGrummAG, 23)

32024 The emphatic *zo* (§26.1.1.5) is also analyzable as a postverbal adverb especially
 32025 when followed by a demonstrative determiner as in (37) (see also 16 and 18,
 32026 §23.3.2).

- 32027 (37) *[skym-ndzi kuu-jujaʂ], stu kuu-jav zo] nuu*
 ox-skin SBJ:PCP-EMPH~be.thick most SBJ:PCP-be.thick EMPH DEM
 32028 *tu-qyr-nuu tce*
 IPFV-select-PL LNK
 32029 ‘People select very thick ox skin, the thickest one.’ (24-mbGo, 71)

32030 However, the indefinite determiner *ci* is also attested before the emphatic *zo* as
 32031 in (38), showing that it is external to the relative in this case, since *ci* itself must
 32032 be external (otherwise it would be located just after the head noun *smar* ‘river’,
 32033 §23.3.5.1).

- 32034 (38) *[smar kuu-wxtu~wxti] ci zo pui-tu juu-ŋu*
 river SBJ:PCP-EMPH~be.big INDEF EMPH PST.IPFV-exist SENS-be
 32035 ‘There was a huge river.’ (2005 Kunbzang, 161)

32036 In the absence of determiner (as in 16, §23.3.2), it is unclear whether postverbal
 32037 *zo* belongs to the relative or not.

32038 23.4 Position of the relativized element

32039 Pre-, post-nominal and head-internal relative clauses are all attested in Japhug,
 32040 though the position of the relativized element is not free and depends on various
 32041 factors, in particular its function in the relative clause.

23.4.1 Headless

An important proportion, if not a large majority of the relatives in the corpus lack an overt head. For instance, in (39), minimal relative clause *pui-kuu-si* ‘(the one(s)) that has/have died’ only contains a verb in participial form (§16.1.1.4).⁴

- (39) [pui-kuu-si] *uu-ca* *nui tu-ndze* *ŋu* *ma.*
 AOR-SBJ:PCP-die 3SG.POSS-flesh DEM IPFV-eat[III] be:FACT LNK
 ‘(Crows) eat the flesh of (animals) that have died.’ (22-qajdo, 16)

Nominal heads are optional in relative clauses (as they are in the noun phrase in general, §9.3). The only non-optional heads are the resumptive pronouns that occur in a very specific construction (§23.3.1) and the possessive prefixes on the possessee in relatives whose heads are possessor of subject or object (§23.5.10).

23.4.2 Prenominal

Three types of prenominal relatives must be distinguished, depending on the nature of the relationship between the head noun and the relative clause.

First, *genitival* prenominal relatives are those in which the genitive marker *yu* is inserted between the subordinate clause and the head noun (§23.2.3).

Second, *relator noun* prenominal relatives take generic inalienably possessed noun such as *uu-spa* ‘its material’ (§23.5.6, §23.2.4), *uu-stu* ‘place’ (§23.5.5.3) or *uu-sŋi* ‘the day when’ (§23.5.9). This type of prenominal clauses are common in the case of adjunct relativization.

Third, *standard* prenominal relative clauses have head nouns without possessive prefixes (unless the head noun is inalienably possessed, in which case possessor neutralization may take place, §23.3.4). They are the preferred relativization type in the case of transitive subjects (§23.5.2), and are also available for other core arguments (§23.5.3, §23.5.1).

23.4.3 Head-internal

When the head noun of the relative is overt, it can occur within the relative at the position that would be expected in the corresponding independent sentence: for instance, the noun *tu-ŋga* ‘clothes’ is located between the instrumental adjunct and the verb both in the head-internal relative in (40) and in the independent clause in (41).

⁴The noun *uu-ca* ‘its meat/flesh’ in (39) is not the head of the relative, but the possessee of that head (§23.2.3).

23 Relative clauses

- 32072 (40) [ty-rme kuu **tuu-ŋga** t^huu-ky-βzu] nuura
INDEF.POSS-hair ERG INDEF.POSS-clothes AOR-OBJ:PCP-make DEM:PL
32073 *ŋja tu-nuze juu-ŋju.*
completely IPFV-eat[III] SENS-be
32074 ‘It eats all of the clothes that are made of (animal) hair.’ (28-kWpAz, 112)
- 32075 (41) *pak-ndzi kuu tuu-ŋga c^huu-βzu-nuu, pak-ndzi kuu*
pig-skin ERG INDEF.POSS-clothes IPFV-make-PL pig-skin ERG
32076 *tuu-xtsa tuu-βzu-nuu ra juu-ŋgryl*
INDEF.POSS-shoes IPFV-make-PL PL SENS-be.usually.the.case
32077 ‘(Nowadays, unlike in former times, people) make clothes and shoes from
32078 pig hide.’ (05-paR, 115-116)

32079 The following subsections focus on the conditions where head-internal rel-
32080 atives are selected rather than prenominal ones (§23.4.3.1), and on the criteria
32081 that can be used to distinguish between head-internal and postnominal relatives
32082 (§23.4.3.2).

32083 23.4.3.1 Head-internal vs. prenominal relatives

32084 Core argument relatives can be either head-internal or prenominal. When the
32085 relativized element is the transitive subject, prenominal position is more common
32086 (§23.5.2), but for intransitive subject (§23.5.1), direct object (§23.5.3) and quasi-
32087 objects (§23.5.4), head-internal relatives are by far the most common type.

32088 When the relativized element is a noun such as *tuu-tç^ha* ‘news’ or *ftçaka* ‘man-
32089 ner’ which can take adnominal complements (§24.6), only head-internal relatives
32090 are possible, as prenominal clauses are interpreted as complements instead of
32091 relatives. For instance, the head noun *tuu-tç^ha* in (42) cannot be moved after the
32092 participle: †*a-tçuu kuu jy-ky-yut tuu-tç^ha nuu* is not accepted.

- 32093 (42) [*a-tçuu kuu **tuu-tç^ha** jy-ky-yut*] nuu juu-pe
1SG.POSS-son ERG INDEF.POSS-news AOR-OBJ:PCP-bring DEM SENS-be.good
32094 ‘The informations that my son has brought are nice.’ (elicited)

32095 23.4.3.2 Head-internal vs. postnominal relatives

32096 Since Japhug has strict verb-final order (§22.1.1), in head-internal relative clauses
32097 the verb follows the head noun, as it would in a postnominal relative. In many
32098 cases it is indeed impossible to ascertain whether the head-noun belongs or not to
32099 the relative. For instance, in (43) *k^hutsa puu-ky-βbum* ‘a bowl that has been turned

³²¹⁰⁰ upside down' there is no clear evidence for analyzing the head noun *kʰutsa* 'bowl'
³²¹⁰¹ as internal or external to the relative.

- ³²¹⁰² (43) *kʰutsa puu-kx-βuum zo puu-fse.*
 bowl AOR-OBJ:PCP-turn.upside.down EMPH SENS-be.like
³²¹⁰³ 'It looks like a bowl that has been turned upside down.' (23-mbrAZim,
³²¹⁰⁴ 209)

³²¹⁰⁵ However, with other types of relative clauses there is sometimes positive ev-
³²¹⁰⁶ idence that the head noun is internal. When the function of the relativized ele-
³²¹⁰⁷ ment is that of transitive subject (§23.5.2), the presence of ergative marking can
³²¹⁰⁸ be a criterion for analyzing it as relative-internal. In (44) for instance, the phrase
³²¹⁰⁹ *tr-pvtsø ci kuu* is necessarily internal to the participial relative clause, since the
³²¹¹⁰ main verb *jx-ye* is intransitive, and only the transitive verb *w-kuu-numbrwpuu* in
³²¹¹¹ the relative clause can have triggered ergative marking.⁵

- ³²¹¹² (44) [*tr-pvtsø ci kuu <yangma> w-kuu-numbrwpuu*] *ci*
 INDEF.POSS-child INDEF ERG bicycle 3SG-SBJ:PCP-ride INDEF
³²¹¹³ *jx-ye tce*
 AOR-come[II] LNK
³²¹¹⁴ 'A boy who was riding a bicycle arrived.' (Pear story, Tshendzin, 5)

³²¹¹⁵ In (45) however, the transitive subject *turme* owes its ergative to the main verb
³²¹¹⁶ *jnu-jtsʰi* rather than to the participle *tr-kuu-rqoʂ*. The clause *tr-rjít tr-kuu-rqoʂ* 'hug-
³²¹¹⁷ ging the child' is analyzable either as an appositive postnominal relative clause,
³²¹¹⁸ or as a participial clause.

- ³²¹¹⁹ (45) [*turme kuu [tr-rjít tr-kuu-rqoʂ]*] *tuu-nuu*
 person ERG INDEF.POSS-child AOR-SBJ:PCP-hug INDEF.POSS-breast
³²¹²⁰ *jnu-jtsʰi]* *nuu kuu-fsu~fse zo jnu-jtsʰi*
 IPFV-give.to.drink DEM SBJ:PCP-EMPH~be.like EMPH IPFV-give.to.drink
³²¹²¹ *jnu-ɳu.*
 SENS-be
³²¹²² '(The female monkey) breastfeeds in the same way as a human
³²¹²³ breastfeeds, hugging her child.' (19-GzW, 26)

³²¹²⁴ In the case of object relatives, the presence of the transitive subject (*tr-tquu nu*
³²¹²⁵ *kuu* 'the boy' in 46), of an adjunct (the instrumental phrase *rjul kuu* 'from silver'

⁵In addition, example (44) provides an interesting case of double determiner marking (§23.3.5.1).

23 Relative clauses

32126 in 47) or of an adverb (*at^{hi}* DOWNSTREAM in 48) belonging to the relative before
32127 the head noun are sufficient criteria to show that the relative is head-internal,
32128 and cannot be analyzed as post-nominal.

- 32129 (46) [t_r-tcu_w nu_w k_w u_w-t_rp_i nu_w ka-t^hu_w] nu_w
INDEF.POSS-son DEM ERG 3SG.POSS-staff DEM AOR:3→3':EAST-spread DEM
32130 u_w-ta_w ky-nu_w-lo_w-ndzi
3SG.POSS-on AOR:EAST-AUTO-come.out-DU

32131 ‘They crossed (the river) on the staff that the boy had put across it as a
32132 bridge.’ (2005 Kunbzang, 162)

- 32133 (47) [r_ju_w k_w q_as t^hu_w-ky-su_w-βzu] nu_w ko-su_w-y_zirja-nu_w.
silver ERG hoe AOR-OBJ:PCP-CAUS-make DEM:PL IFR-CAUS-be.align-PL
32134 ‘They aligned the hoe that had been made from silver.’ (28-qAjdoskAt,
32135 102)

- 32136 (48) ku_wi [at^{hi} qacti ky-ntsye lu-ky-yut]
DEM.PROX downstream peach INF-sell IPFV:UPSTREAM-OBJ:PCP-bring
32137 nu_w c^ho na_wt_cu_wy
DEM COMIT be.the.same:FACT
32138 ‘(Wild peaches) are like those peaches that are brought from areas
32139 downstream (the Sichuan plains) to be sold.’ (08-qaCti, 46)

32140 23.4.4 Postnominal

32141 There are only few unambiguous postnominal relative clauses in Japhug, since
32142 most relative clauses comprising a noun and a verb can be analyzed as minimal
32143 head-internal relatives. The only clear cases are provided by transitive subject
32144 (§23.5.2) participial relative clauses in *ku-* (§16.1.1.4). In these cases, the head
32145 noun, being a transitive subject, must take the ergative *k_w* (§8.2.2.1) if embed-
32146 ded in the clause. The presence or absence of ergative flagging can therefore be
32147 used as a criterion to distinguish between postnominal and head-internal clau-
32148 ses (§23.4.3.2). Examples are rather uncommon, since transitive subject relative
32149 clauses are most commonly prenominal (§23.5.2).

32150 Many examples of postnominal relatives are preceded by a pause, as in (49),
32151 and are appositive clauses, rather than truly subordinate clauses.

- 32152 (49) *tr-mu ci, [tua-sŋab ra*
 INDEF.POSS-mother INDEF NMLZ:ACTION-enchant PL
 32153 *w-kua-spa] ci pjy-tu tce*
 3SG.POSS-SBJ:PCP-be.able INDEF IFR.IPFV-exist LNK
 32154 ‘There was an old woman who knew enchantments.’ (150818 muzhi
 32155 guniang-zh, 16)

32156 Several examples of postnominal clauses are found with perception verbs with
 32157 totalitative reduplication, such as (50) below, (19) in §23.3.2 above and (56) in
 32158 §23.5.2.

- 32159 (50) *[tuar-me ra [puu-puu-kua-mto]] kuu “wo, nuu*
 person PL TOTAL~AOR-SBJ:PCP-see ERG INTERJ DEM
 32160 *w-tua-pe nuu” ntsui to-ti-nuu.*
 3SG.POSS-NMLZ:DEG-be.good SFP always IFR-say-PL
 32161 ‘All the people who saw it said ‘It is so nice!’’ (150827 mengjiangnv-zh, 24)

32162 When the relativized element is the intransitive subject, head-internal and
 32163 postnominal relatives can be distinguished by the relative position of head nouns
 32164 and adjuncts. It is particularly clear in the case of the comparative construction
 32165 (§23.5.1.2).

32166 23.5 Function of the relativized element

32167 This section presents a classification of relative clauses based on the syntactic
 32168 function of the relativized element inside the relative.

32169 Core arguments, possessor of core arguments as well as a certain number of
 32170 adjuncts can be relativized using participial or finite clauses. The syntactic func-
 32171 tions that are not accessible to relativization are listed in §23.5.12.

32172 23.5.1 Intransitive subject

32173 The only way to relativize intransitive subjects in Japhug is by a subject particip-
 32174 ial relative in *kua-* (§16.1.1.4).

32175 23.5.1.1 Position of the head noun

32176 When the head noun of an intransitive subject relative is overt, it is generally
 32177 located before the participle as in (51). This example can be analyzed either as a
 32178 postnominal relative (§23.4.4) or as minimal head-internal relative (§23.4.3).

23 Relative clauses

- 32179 (51) [ty-rza β] *jy-kuu-ye* *numua k^hro*
 INDEF.POSS-wife AOR-SBJ:PCP-come[II] DEM much
 32180 *mua-puu-sna* *pua-ŋu.*
 NEG-PST.IPFV-be.good SENS-be
 32181 ‘The wife that had come (to their house, that they had married) was not
 32182 nice.’ (meimeidegushi, 20)

32183 The presence of adjuncts, such as *kuu-myrku* ‘before’ (§16.2.1.8) before the head
 32184 noun offers evidence that, in some cases, the head-internal relative analysis is
 32185 preferable (§23.4.3). Example (52) also illustrates that head-internal relatives with
 32186 embedded purposive complements located between the head noun and the verb
 32187 are possible.

- 32188 (52) *icq^ha* [*kuu-myrku* *tcaχpa* [*kuu-nyrura*]]
 the.aforementioned INF:STAT-be.before thief SBJ:PCP-look.around
 32189 *jy-kuu-yri]* *nua bnuaz nua pjy-sat.*
 AOR-SBJ:PCP-go[II] DEM two DEM IFR-kill
 32190 ‘He killed the two thieves that had gone scouting just before.’ (140512
 32191 alibaba-zh, 199)

32192 Prenominal clauses (§23.4.2) are less common than head-internal or postnomi-
 32193 ninal ones in the case of intransitive subject relativization, but still attested, espe-
 32194 cially in the case of multiple relative clauses sharing the same head noun, as in
 32195 (53).

- 32196 (53) [*mumji ky-kuu-ye*] *xpum* [*t^huu-kuu-rgyz*] *ci*
 TOPO AOR:EAST-SBJ:PCP-come[II] monk AOR-SBJ:PCP-be.old INDEF
 32197 *pjy-tu* *tce*
 IPFV.IFR-exist
 32198 ‘There was an old monk who had come from Mengi.’ (08-kWqhi, 19)

32199 Participle of adjectival stative verbs in attributive function are one of the most
 32200 common type of subject relative clauses (this construction is discussed in more
 32201 detail in §9.1.8.3).

32202 23.5.1.2 Comparee

32203 The compared element of comparative constructions is relativized like a normal
 32204 intransitive subjects, but with an overt standard. Head-internal (54a), postnomi-
 32205 ninal (54b) and prenominal (54c) relatives are all attested and equally common, and

32206 can be distinguished by the relative position of the head noun and the standard
 32207 of comparison *wzo syz* ‘than him/her/itself’.

- 32208 (54) a. [*wzo syz rūdās kui-xtei*] *nura tu-ndze*
 3SG COMP animal SBJ:PCP-be.small DEM:PL IPFV-eat[III]
 ‘It eats the animals that are smaller than itself?’(20-sWNgi, 20)
- 32209 b. *rūdās* [*wzo syz kui-xtei*], *p̥ya* [*wzo syz kui-xtei*]
 animal 3SG COMP SBJ:PCP-be.small bird 3SG COMP SBJ:PCP-be.smal
 nura tu-ndze p̥ui-cti.
 DEM:PL IPFV-eat[III] SENS-be.AFF
 ‘It eats the animals and the birds that are smaller than
 itself.’(24-ZmbrWpGa, 95)
- 32210 c. [*wzo syz kur-xtei*] *qajw ra tu-ndze*
 3SG COMP SBJ:PCP-be.small bug PL IPFV-eat[III]
 ŋgryl my-ŋgryl
 be.usually.the.case:FACT NEG-be.usually.the.case:FACT
 my-xsi ma
 NEG-GENR:know LNK
 ‘I don’t know whether it eats the bugs that are smaller than itself.’
 (26-kWrNukWGndZWr, 53)

32219 23.5.2 Transitive subject

32220 Transitive subjects are exclusively relativized using subject participial relative
 32221 clauses in *kui-* (§16.1.1.4) like intransitive subjects (§23.5.1), but take a posses-
 32222 sive prefix coreferent with the object (§16.1.1.1), unless another prefix is present
 32223 (§16.1.1.2).

32224 In a minority of cases, the transitive subject head noun can occur before the
 32225 verb. In this position, it sometimes takes the ergative, as illustrated by the phrase
 32226 *ty-nmas nuu kui* in (55). The presence of the ergative here unambiguously indicates
 32227 that the relative is head-internal and that the transitive subject is embedded in-
 32228 side it, since the main verb *p̥y-tu* ‘there used to be’ is intransitive (§23.4.3.1).

- 32229 (55) [*ty-nmas nuu kui ui-rzaβ kui-yn̩tcʰuu*
 INDEF.POSS-husband DEM ERG 3SG.POSS-wife SBJ:PCP-be.several
 p̥ui-kui-nui-car], [*a拜ndundyt tyndyyri*
 IPFV-SBJ:PCP-AUTO-search everywhere illegitimate.child

- 32231 *tu-kui-βzu]* *pjy-tu.*
 IPFV-SBJ:PCP-make IFR.IPFV-exist
 32232 ‘There were men who had several female companions, and made
 32233 illegitimate children everywhere.’ (140427 tAndAGri, 3-4)
- 32234 Alternatively, the transitive subject can occur in absolute form (for instance
 32235 *turme* ‘person’ in 56),⁶ showing that the relative is postnominal (§23.4.4).

- 32236 (56) *[turme [puu~puu-kui-mto]] kui puu-ny-mpcyr-nu* *tce*
 person TOTAL~AOR-SBJ:PCP-see ERG SENS-TROP-be.beautiful-PL LNK
 32237 ‘*nui-pe*” *tu-ti-nui* *pjy-ηu*
 SENS-be.good IPFV-say-PL IFR.IPFV-be
 32238 ‘All the people who saw it found it beautiful it said it was nice.’ (140510
 32239 sanpian yumao-zh, 87)

32240 There are no examples of double ergative marking, with a head-internal rel-
 32241 ative in transitive subject function in the main clause itself, taking the ergative
 32242 both on the head noun and at the end of the clause, for instance as construction
 32243 such as ?[*turme kui puu~puu-kui-mto*] *kui* instead of [*turme [puu~puu-kui-mto]*] *kui*
 32244 in (56).

32245 23.5.3 Object

32246 Relativization of direct objects allows for a greater variety of constructions than
 32247 that of subjects: both finite and participial relative clauses are possible.

32248 In object participial relatives, the participle can be prefixed with an orienta-
 32249 tion preverb as in (57), or with a possessive prefix coreferent with transitive sub-
 32250 ject. In the first case (restricted to third person subjects), the relatives are most
 32251 commonly head-internal (or postnominal) as in (57), but other constructions are
 32252 possible. Attested types of object participial relatives are described in §16.1.2.4.

- 32253 (57) *[tcʰeme puu-ky-sat] nui pyxtci ci to-sci qʰe,*
 girl AOR-SBJ:PCP-kill DEM bird INDEF IFR:UP-be.born LNK
 32254 ‘The girl who had been killed was reborn as a bird.’ (2014-kWLAG, 493)

32255 Since object participles cannot take both possessive prefixes and orientation
 32256 preverbs (§16.1.2.1), finite relativization is the only way to specify both TAME
 32257 and person in an object relative, as in (58) and (59).

⁶In (56), the ergative *kui* follows the relative clause, which has transitive subject function in the main clause. The head noun *turme* itself is not assigned ergative case by the transitive participle *puu~puu-kui-mto*.

- 32258 (58) *nur [qajuu kui-pas tu-ti-a] nur nur kur-fse*
DEM worm SBJ:PCP-black IPFV-say-1SG DEM DEM SBJ:PCP-be.like
32259 *pui-βze pui-ŋu.*
IPFV-grow SENS-be
32260 ‘The black worm that I am talking about grows like that.’ (28-kWpAz, 30)
- 32261 (59) *nyzo [icq^ha ndzruu t^hui-tui-fse-t] nu ci ty-nui-ts^hyt tce*
2SG just.before chisel AOR-2-whet-PST:TR DEM a.little IMP-AUTO-try LNK
32262 ‘Try the chisel that you have just whetted.’ (150902 luban-zh, 130)

32263 Object finite relatives with overt head noun are mainly head-internal, as (59)
32264 (see also §23.4.3.2), or ambiguous between postnominal and head-internal as in
32265 (58). Prenominal finite relatives are attested, but rarer. All four possibilities to rel-
32266ativize objects (finite vs? participial, head-internal vs. prenominal) are illustrated
32267 in (60).

- 32268 (60) a. *[a-tciu kui pya pa-mto] nur*
1SG.POSS-son ERG bird AOR:3→3'-see DEM
32269 b. *[a-tciu kui pya pui-ky-mto] nur*
1SG.POSS-son ERG bird AOR-OBJ:PCP-see DEM
32270 c. *[a-tciu kui pa-mto] pya nur*
1SG.POSS-son ERG AOR:3→3'-see bird DEM
32271 d. *[a-tciu kui pui-ky-mto] pya nur*
1SG.POSS-son ERG AOR-OBJ:PCP-see bird DEM
32272 ‘The bird that my son saw.’ (elicited)

32273 There are some contexts where finite relatives have to be head-internal or
32274 postnominal and where the prenominal position is ungrammatical (§23.4.3.1).

32275 23.5.3.1 Monotransitive verbs

32276 When the object of monotransitive verbs are relativized using a finite relative,
32277 the verb must be in direct form, even when the transitive subject of the relative
32278 has a possessive prefix coreferent with the object. For instance, in (61), only the
32279 3→3' form *ka-nupor* is possible, the inverse 3'→3 configuration *ký-wy-nupor* is
32280 not possible in the context.

- 32281 (61) *[u_i-mu kui ka-nupor] ty-pytso_i nur*
3SG.POSS-mother ERG AOR:3→3'-kiss INDEF.POSS-child DEM
32282 ‘The child whose mother kissed him.’ (elicited)

23 Relative clauses

32283 In addition, only third person object forms (excluding inverse 3→1/2 and local
32284 configurations) of monotransitive verbs can be relativized. This constraint does
32285 not apply to triactantial causative (§23.5.3.3) or secundative verbs (§23.5.4.2).

32286 23.5.3.2 Theme of indirective verbs

32287 The theme of indirective verbs such as *k^ho* ‘give’ or *ti* ‘say’ (§14.4.1) has the same
32288 morphosyntactic status as the direct object of a monotransitive verb, both from
32289 the point of view of person indexation and of relativization: it is also relativizable
32290 by both finite clauses (62) and object participial clauses (63).

- 32291 (62) *t_xtcuipuu nuu kuu [icq^ha mbala-do nuu kuu t_y-ky-tuit] nuu*
boy DEM ERG just.before ox-old DEM ERG AOR-OBJ:PCP-say[II] DEM
32292 *to-suuijiti.*

IFR-remember

32293 ‘The boy remembered (the words) that the old ox had told him.’ (150828
32294 niulang-zh, 57)

- 32295 (63) *tceri [mbala kuu ta-tuit] nuu to-stu*
LNK OX ERG AOR:3→3'-say[II] DEM IFR-do.like

32296 ‘He did it (the way that) the ox had said.’ (150828 niulang-zh, 136)

32297 23.5.3.3 Object of causativized transitive verbs

32298 Causativized transitive verbs are triactantial (causer, causee and object, §14.4.3)
32299 and differ from monotransitive verbs (§23.5.3.1) in that their object can be rela-
32300 tivized using finite relatives with a verb in inverse configuration (64) or with
32301 a first or second person object (including local configurations, as in 65). The
32302 theme of secundative verbs can be relativized using the same type of construc-
32303 tions (§23.5.4.2).

- 32304 (64) *[t_y-wy-z-nympo] nura kuu~kuu-fsuu~fse zo*
AOR-INV-CAUS-WATCH DEM:PL TOTAL~SBJ:PCP-EMPH~be.like EMPH
32305 *to-βzu pjx-c^ha.*

IFR-make IFR-can

32306 ‘(Luban)_i succeeded in making all (the objects) that (his teacher)_j had
32307 shown him_i exactly as they were (before).’ (150902 luban-zh, 169)

- 32308 (65) [mbaly-pu^r jy-kui-sui-cyaz-a] nu^r pa-mto tce
 OX-DIM AOR-2→1-CAUS-take.back-1SG DEM AOR:3→3'-see LNK
 32309 'She saw the calf that you had me take back home.' (140512 fushang he
 32310 yaomo1-zh, 134)

32311 In examples (64) and (65), the person configuration indexes causer and causee,
 32312 not the direct object.

32313 23.5.3.4 Only argument of transitive verbs with dummy subjects

32314 The only argument of dummy transitive verbs (§14.3.5), despite resembling a di-
 32315 rect object, is relativized with subject participles, as *tu-kui-rku* in (66) (§22.4.2.7)
 32316 and *ku-kui-ts^ho_R* in (67) (§22.4.2.8).

- 32317 (66) nu^r ri t^c^huwur tu-rke ju tce, tce [t^c^huwur
 DEM:LOC LOC blister IPFV-put.in[III] be:FACT LNK LNK [blister
 32318 tu-kui-rku] nu^r cimbyrom ju
 IPFV-SBJ:PCP-put.in] DEM phlycten be:FACT
 32319 '(At the place where the skin is burnt), a blister forms there, the blister
 32320 that forms is a phlycten.' (27-tWfCAL 122, 123)

- 32321 (67) tce icq^ha mbryz yuu [u^r-mat ku-kui-ts^ho_R]
 LNK the.aforementioned rice GEN 3SG.POSS-fruit IPFV-SBJ:PCP-attach
 32322 nu^r u^r-ts^huya ju^r-fse
 DEM 3SG.POSS-shape SENS-be.like
 32323 'Its form is a bit like that of grains of rice (growing on the stalk).'
 32324 (19-khWlu, 94)

32325 Finite clauses and object participial clauses cannot be used to relativize these
 32326 arguments. This is one of the clues (§16.2.3, §14.3.5) that the verbs in these con-
 32327 structions are only partially transitive.

32328 23.5.4 Quasi-objects

32329 A certain number of absolute arguments that are not indexed as direct objects
 32330 on the verb (§14.3.2)) have objectal properties: the semi-objects of semi-transitive
 32331 verbs (§14.2.3) and the themes of secundative verbs (§14.4.2). They can be rela-
 32332 tivized like direct objects of monotransitive verbs, both with finite and participial
 32333 relatives (Jacques 2016d).

32334 23.5.4.1 Semi-objects

32335 Semi transitive verbs like *rga* ‘like’, *βjyt* ‘obtain’ or *aro* ‘own’ are morphologically
 32336 intransitive and their subject is marked in the absolutive (§14.2.3), but they take
 32337 in addition an absolutive semi-object (§8.1.5). The semi-object can be relativized
 32338 with either object participial relatives (68) or finite relative clauses as in (69) and
 32339 (70).

- 32340 (68) [pya ra nuu-ky-rga] nuu qaj ntsuu ηu
 bird PL 3PL-OBJ:PCP-like DEM wheat always be:FACT
 32341 ‘(The food) that birds like is always wheat (not barley).’ (23 pGAYaR, 30)
- 32342 (69) [laχtçʰa puu-βjat-a] nuu kʰutsa puu-ηu
 thing AOR-obtain-1SG DEM bowl PST.IPFV-be
 32343 ‘The thing that I obtained was a bowl.’ (elicited)
- 32344 (70) [azo qazo aro-a] nuu kuuki ηu
 1SG SHEEP OWN:FACT-1SG DEM DEM.PROX be:FACT
 32345 ‘The sheep that I own is this one.’ (elicitation)

32346 23.5.4.2 Theme of secundative verbs

32347 Secundative verbs such as *mbi* ‘give’ or *suxçyt* ‘teach’ index the recipient as direct
 32348 object, but also take a non-indexed absolutive argument referring to the theme
 32349 (§14.4.2). When both the subject and the direct object are third person, theme can
 32350 be relativized either with a finite clause (71, 72) or an object participial clause (ex-
 32351 ample 24, §23.3.4). Head-internal clauses are most common (71), but prenominal
 32352 and even genitival ones (§23.2.3) are also found, as in (72).

- 32353 (71) [sla kuu, nyki, kumpyyx-ŋgum nū-wy-mbi] nuu pjx-qruu
 moon ERG FILLER hen-egg AOR-INV-give DEM IFR-break
 32354 ‘She broke the egg that the moon had given her.’ (140506 shizi he
 32355 huichang de bailingniao-zh, 260)
- 32356 (72) [tx-tcuu nuu kuu, saŋrjyz ra kuu pū-wy-suxcxt] yuu kʰynduan
 INDEF.POSS-son DEM ERG buddha PL ERG AOR-INV-teach GEN mantra
 32357 nuu u-rzaβ χsum nuu pjx-suxcxt
 DEM 3SG.POSS-wife three DEM IFR-teach
 32358 ‘He taught the mantra that the Buddhas had taught him to his three
 32359 wives.’ (2012 Kunbzang, 358)

32360 In finite relative clauses, the inverse 3' → 3 configuration is most often found
 32361 when the transitive subject of the main clause corresponds to the direct object
 32362 (recipient) of the relative clause, as in (71) and (72), and the relativized element
 32363 is the theme. Secundative verbs resemble in this regard causativized transitive
 32364 verbs (§23.5.3.3) and differ from monotransitive verbs, whose objects cannot be
 32365 relativized using a finite 3' → 3 configuration (§23.5.3.1).

32366 The themes of secundative verbs being relativized with the same constructions
 32367 as their direct objects, ambiguity can arise especially in the case of short relatives.
 32368 For instance, the participle *a-kyr-suxçyt* of *suxçyt* ‘teach’ can be understood as relativizing
 32369 the direct object/recipient (73a) or the theme (73b). The antipassive can
 32370 be used to disambiguate: since this derivation removes the object, the only interpreta-
 32371 tion left for the antipassive participle *a-kyr-sy-suxçyt* is theme relativization
 32372 ‘the (subject) that I taught’ (see also example 80, §16.1.2.4).

- 32373 (73) a. [a-kyr-suxçyt] *nui tamu puu-ŋu.*
 1SG-OBJ:PCP-teach DEM ANTHR PST.IPFV-be
 ‘The person whom I taught (it) to was Lhamo.’ (elicited)
- 32374 b. [a-kyr-suxçyt] *nui <shuxue> puu-ŋu.*
 2SG-OBJ:PCP-teach DEM mathematics PST.IPFV-be
 ‘The (subject) that I taught (them/him/her) was maths.’ (elicited)
- 32375 c. [a-kyr-sy-suxçyt] *<yuwen> puu-ŋu.*
 2SG-OBJ:PCP-ANTIP-teach Chinese what PST.IPFV-be
 ‘The (subject) that I taught (them/him/her) was Chinese.’ (elicited)

32379 Finite relatives in direct form can also be used to relativize both the direct
 32380 object (74a) or the theme (74b).

- 32381 (74) a. [*rŋual nui-tuu-mbi-t*] *nui cuu puu-ŋu?*
 silver AOR-2-give-PST:TR DEM who PST.IPFV-be
 ‘Whom did you give money to?’
- 32382 b. [*a-tcu tr-pyro nui-mbi-t-a*] *nui kumte^huu puu-ŋu*
 1SG.POSS-son INDEF.POSS-present AOR-give-PST:TR-1SG DEM toy
 PST.IPFV-be
 ‘The present I gave to my son was a toy.’ (elicited)

32386 Finite clauses are needed to specify both TAME and a first or second person
 32387 subject, as in (74a) and (74b), as object participles cannot index the subject (73a)
 32388 while at the time taking an orientation preverb.

23 Relative clauses

Finite relative clauses are also required to index a first or second person direct object (recipient), for instance in local configurations such as ‘the thing that I have (taught/given) you’ in (75). This type of clause is only interpretable as theme relativization.

- (75) *a-tciu tur~tua-ŋu n_x, [puu-ta-suxcxt] nuu ci nuu-ndum*
1SG.POSS-son COND~2-be:FACT ADD AOR-1→2-teach DEM a.little IMP-recite
ra
be.needed:FACT
'If you are my son, recite (the mantra) that I have taught you.' (2012
Kunbzang, 221)

23.5.5 Goal and locative

Relativization of locative/goal adjuncts or arguments with oblique participial clauses is described in §16.1.3.5. This section presents the relativization of locative phrases with finite clauses, object participles and relator nouns.

23.5.5.1 Finite relativization

Locative marking on goals and locative arguments and adjuncts is optional, and they can occur in absolute form (§8.1.8), like semi-objects (§8.1.5). Another commonality between goal/locative arguments and semi-objects is the ability to be relativized using finite relative clauses (§23.5.4.1).

Finite locative relative clauses are most often prenominal, in particular with a genitive marker (§23.2.3), as in (76).

- (76) *[zara kuu-lxy puu-ce-nuu] yuu tʂu ci tu tce*
3PL SBJ:PCP-herd IPFV:WEST-go-PL GEN path INDEF exist:FACT LNK
'(At that place), there is a path which they take to go to herd (cattle).' (140522 Kamnyu zgo, 303)

Headless (77) and head-internal (78) finite locative relatives are also attested. In the latter case, the head noun cannot receive locative case, and must be in absolute form.

- (77) *[ku-ryzi] nuu k^hu uu-sta cti ndyre*
IPFV-stay DEM tiger 3SG.POSS-place be.AFF:FACT LNK
'The place where he is (now) is a tiger's lair.' (2003kandZislama, 98)

- 32416 (78) [k^ha jí-wy-tsum-nu] nuunu, [lonba com ku
 house IFR-INV-take.away-PL DEM all iron ERG
 32417 nu-ky-sui-βzu] k^ha pjy-ŋu
 AOR-OBJ:PCP-CAUS-make house IFR.IPFV-be
 32418 ‘The house where (the king) had taken them, it was a house made
 32419 completely from iron.’ (140505 liuhaohan zoubian tianxia-zh, 151-153)

32420 Non-permanent and non-specific location can be relativized with finite rela-
 32421 tive clauses, as in (77) and (78). Thus, the finite relative *ku-ryzi nu* in (77) can be
 32422 translated as ‘the place where he happens to be’ while ‘the place where he stays
 32423 (permanently), his staying place’ is better expressed with an oblique participle
 32424 *w-(sr)z-ryzi* (§16.1.3.5).

32425 23.5.5.2 Object participle

32426 The negative object participle of the perception verbs *mto* ‘see’ and *mts^hym* ‘hear’
 32427 has a special use: in (79) for instance, *w-mr-ky-mto* means ‘(somewhere) s/he
 32428 cannot see him/her’, the relativized element being locative rather than object (see
 32429 §16.1.2.5 for further discussion). This type of relative clauses are always headless.

- 32430 (79) [icq^ha qacpa kuu w-mr-ky-mto zo] jo-ce
 32431 the.aforementioned frog ERG 3SG.POSS-NEG-OBJ:PCP-see EMPH IFR-go
 32432 ‘She went to (a place) where the frog would not find her.’ (150818 muzhi
 guniang-zh, 149)

32433 23.5.5.3 Relator noun

32434 The two inalienably possessed nouns *w-stu* ‘place’ and *w-sta* ‘place’, both origi-
 32435 nating from lexicalized oblique participles (Table 16.4, §16.1.3.10) can be used as
 32436 relator nouns of prenominal locative relative clauses.

32437 The noun *w-stu* ‘place’ either selects subject participial clauses, as in (80) and
 32438 (81), or oblique participial clauses (82). The relativized element can be a static
 32439 location, but also a goal (see 10, §23.2.5).

- 32440 (80) [wzo kui-ryzi] w-stu zo nuu kú-wy-sui-ysuiy.
 32441 3SG SBJ:PCP-stay 3SG.POSS-place EMPH DEM IPFV-INV-CAUS-be.tight
 32442 ‘One presses the place (in the cow’s hide) where (the bug) is.’
 (25-akWzgumba, 12)

23 Relative clauses

- 32443 (81) [numuu tui-*yntym* *ly-kur-za*] *w-stu* *nui*
DEM INF:II-be.flat AOR:UPSTREAM-SBJ:PCP-start 3SG.POSS-place DEM
32444 *wi-mp^husku* *tu-kua-ti* *ŋu*.
3SG.POSS-rump IPFV-GENR-say be:FACT
32445 ‘(When one goes upstream), the place where (the slope on the mountain)
32446 starts to become flatter (the point of inflection in the slope of the
32447 mountain) is called the ‘rump’ (of the mountain).’ (150908 Wmphsku, 8)

- 32448 (82) *zara* [nui-sy-*ynbaŋ*] *wi-stu* *nuitcu*
3PL 3PL.POSS-OBL:PCP-hide 3SG.POSS-place DEM:LOC
32449 *jo-nui-lob-nui* *tce*,
IFR-AUTO-come.out-PL LNK
32450 ‘They came out of their hiding place.’ (140426 luozi he qiangdao-zh, 24)

32451 The noun *wi-sta*, though also compatible with subject participial clauses, is
32452 more often found with finite relative clauses, as illustrated by (83) and (85).

- 32453 (83) [*pui-nŋŋkuŋke*] *wi-sta* *nura* *rcaŋui*, *tui-cnaβ*
PST.IPFV-DISTR:walk 3SG.POSS-place DEM:LOC UNEXP:FOC INDEF.POSS-snot
32454 *pui-ky-βde* *zo* *fse*
AOR-OBJ:PCP-throw EMPH be.like:FACT
32455 ‘The places on which it (the slug) has moved look like snot has been
32456 spilled (on them).’ (26-qro, 138-139)

32457 While *wi-stu* and *wi-sta* have very close meanings, in the case of verbs taking
32458 a goal such as *ru* ‘look at’ (§15.1.2.4), a semantic difference can be observed: the
32459 former specifically indicates the goal (84a), while the latter is used to indicate the
32460 place where the action takes place (84b).

- 32461 (84) a. *ly-ru* *wi-stu* *nuitcu*
AOR:UPSTREAM-look 3SG.POSS-place DEM:LOC
32462 ‘The direction (upwards) towards which he looked.’ (elicited)
32463 b. *ly-ru* *wi-sta* *nuitcu*
AOR:UPSTREAM-look 3SG.POSS-place DEM:LOC
32464 ‘The place where/from which he looked upwards.’ (elicited)

32465 For instance, in (85), the clause *t^hu-nŋq^haru wi-sta* cannot be understood as ‘the
32466 place towards which he had looked back’.

- 32467 (85) *lo-ce tce tcelo [t^bw-n^yq^baru]*
 IFR:UPSTREAM-go LNK upstream AOR:DOWNSTREAM-look.back
 32468 *wi-sta ly-azyuit ny li c^by-n^yq^baru.*
 3SG.POSS-place AOR-reach ADD again IFR:DOWNSTREAM-look.back
 32469 'He went up there, and when he arrived at the place up there from which
 32470 he had looked back, he looked back again.' (2003 kAndzwsqhaj.2, 116)

32471 23.5.6 Instrument

32472 Instruments are most commonly relativized using oblique participial relatives
 32473 (§16.1.3.6). All instrument oblique relatives in the corpus are headless, and often
 32474 limited to the participle itself. When the nominalized verb is transitive, the par-
 32475 ticipial relative can contain an object as in (86).⁷

- 32476 (86) *nunuu [qandzi c^bwi-sy-ynda] nuu t^boŋt^byr nuu-rmi*
 DEM bullet IPF-OBL:PCP-ram DEM ramrod SENS-be.called
 32477 'What is used to ram a bullet (into the muzzle of the gun) is called a
 32478 ramrod.' (28-CAmWGdW, 55)

32479 Instrumental participial relative clauses can take the generic inalienably pos-
 32480 sessed noun *wi-spa* 'its material' as overt head, to disambiguate with other types
 32481 of relatives, in particular locative ones, built with an oblique participle (§16.1.3).
 32482 For instance, in (87), the focus is on the use of the path (a path specially made in
 32483 order to be able to walk inside the field), rather than simply on the location ('the
 32484 place where one walks').

- 32485 (87) *tce tui-ji wi-χcyl tu-kui-ŋke*
 LNK INDEF.POSS-field 3SG.POSS-middle IPFV-GENR:S/O-walk
 32486 *my-k^bwi ma ty-ryku tu tce tce, nuu yuu*
 NEG-be.possible:FACT LNK INDEF.POSS-crops exist:FACT LNK LNK DEM GEN
 32487 *[tu-sy-ŋke] wi-spa, wi-tsu <zhuānmen>*
 IPFV-OBL:PCP-walk 3SG.POSS-material 3SG.POSS-path specially
 32488 *wi-rkoz pū-wy-βzu ŋgryl tce unuuuu*
 3SG.POSS-special IPFV-INV-make be.usually.the.case:FACT LNK DEM
 32489 *tsu nuu ftcyrū tu-kui-ti ŋu*
 path DEM summer.path IPFV-GENR-say be:FACT
 32490 'One cannot walk in the middle of the fields, because there are crops, so

⁷Antipassivization is required to denote the direct object even for participial verb forms (§18.6.7.4).

32491 that as a way to walk into it, one specially makes a path, and that path is
 32492 call ‘summer path’ (definition, 15-06-05)

32493 Alternatively, in the case of verbs with a sigmatic causative prefix in instru-
 32494 mental function (§17.2.5.8), the instrument can be relativized as if it were a trans-
 32495 itive subject using the *kui-* participle (§16.1.1.4, §23.5.2), for example *u-kui-su-*
 32496 *mp^hul* ‘(the thing) that it reproduces with, (the thing) which makes it reproduce’
 32497 in (88).

32498 (88) *tceri nuuu [u-kui-su-mp^hul]* *nuu li uu-zrym*
 but DEM 3SG-SBJ:PCP-CAUS-reproduce DEM again 3SG.POSS-root
 32499 *nuu-cti ma u-ryi nuu-mas.*
 SEVE-be.AFF LNK 3SG.POSS-seed SEVE-not.be
 32500 ‘What it reproduces with is its root, not its seeds.’ (11-paRzwamWntoR,
 32501 113)

32502 23.5.7 Comitative

32503 Comitative arguments marked with the postposition *c^ho* (§8.2.5) can be relativized
 32504 with the oblique participle (§16.1.3.7). Such relatives are generally headless, as in
 32505 (89).⁸

32506 (89) *uozo uu-χti jny-me tce, nuu-syzduuxpa tce*
 3SG 3SG.POSS-companion IFR-not.exist LNK SENS-be.pitiful LNK
 32507 *uu-syz-rykryz ri maye, uu-kui-qur ri*
 3SG.POSS-OBL:PCP-discuss also not.exist:SENS 3SG.POSS-SBJ:PCP-help also
 32508 *maye*
 not.exist:SENS
 32509 ‘Her husband passed away, poor of her, she has nobody to talk with, and
 32510 nobody to help her.’ (12-BzaNsa, 127-128)

32511 If overt, the head does not take the comitative postposition *c^ho* as in (90), show-
 32512 ing that this type of relative cannot be head-internal and is rather postnominal
 32513 (§23.4.4).

32514 (90) *turme [a-sy-ymumi] nuu lyβzanj nuu-rmi.*
 person 1SG.POSS-OBL:PCP-be.in.good.terms DEM ANTHR SENS-be.called
 32515 ‘The person with whom I am in good terms with is Lobzang.’ (elicited)

⁸The verb *rykryz* ‘discuss’ can select a comitative argument (see example 124, §8.2.5).

32516 **23.5.8 Dative**

32517 Dative arguments (marked with the relator nouns *u-cki* or *u-pe*, §8.3.1) can only
 32518 be relativized with oblique participial clauses (§16.1.3.7). For example, the recipi-
 32519 ent of the indirective verb *ti* ‘say’ (§14.4.1) is relativized with the participle *sy-ti*
 32520 ‘(person) to whom one talks to’, as in (91).⁹

- 32521 (91) *tceri* [“*a-bi*”] *sy-ti]* *dyn* *ma azo yui,*
 LNK 1SG.POSS-younger.sibling OBL:PCP-say be.many:FACT LNK 1SG GEN
 32522 *n̄ykinui, a-bi,* *[tci-mu* *tci-wa*
 FILLER 1SG.POSS-younger.sibling 1DU.POSS-mother 1DU.POSS-father
 32523 *kui-naxt̄cuy]* *a-bi,* *nunura nu-cki* *tce*
 SBJ:PCP-be.the.same 1SG.POSS-younger.sibling DEM:PL 3PL.POSS-DAT LOC
 32524 “*a-bi*” *tu-ti-a,* *a-w̄ymui*
 1SG.POSS-younger.sibling IPFV-say-1SG 1SG.POSS-brother
 32525 *u-r̄j̄it* *tce* “*a-bi*” *tu-ti-a.*
 3SG.POSS-children LNK 1SG.POSS-younger.sibling IPFV-say-1SG
 32526 ‘There are many (people) to whom one says ‘my younger sibling’, those
 32527 of my “younger siblings” whose parents are the same as mine, I say ‘my
 32528 younger sibling’ to them, and I (also) say ‘my younger sibling’ to the
 32529 children of my brothers.’ (140425 kWmdza02, 80-81)

32530 The subject can be optionally indexed as a possessive prefix on the oblique
 32531 participle, as in (92).

- 32532 (92) *[a-z-r̄y-t̄u]* *n̄u ts^hundzum <laoshi>* *ŋu*
 1SG.POSS-OBL:PCP DEM ANTHR teacher be:FACT
 32533 ‘The (person) to whom I ask questions is teacher Tshendzin. (elicited)

32534 There are no examples of head-internal dative relative clauses, with the rela-
 32535 tivized element taking dative marking.

32536 **23.5.9 Time adjuncts**

32537 Oblique participial clauses can have a temporal interpretation, both with transi-
 32538 tive verbs (93) and intransitive stative verbs (94). This way of relativizing tempo-
 32539 ral adjuncts is however quite limited (§16.1.3.7).

⁹The relative clause *t̄ci-mu t̄ci-wa kui-naxt̄cuy* is analyzed in §23.5.10.1.

23 Relative clauses

- 32540 (93) [u-sy-p^hut] nuu, u-sŋi nuu a-my-puu-pe tce
 3SG.POSS-OBL:PCP-CUT DEM 3SG.POSS-day DEM IRR-NEG-IPFV-be.good LNK
 32541 tce li tu-kui-cuu-ngo jnu-ŋgryl
 LNK again IPFV-GENR:S/O-CAUS-be.sick SENS-be.usually.the.case
 32542 'If the day when (the tree) is cut is not auspicious, it causes people to
 32543 become sick.' (24-kWqar, 9)
- 32544 (94) [txjmyy u-sy-dyn] zo jnu-ŋu, t^hamt^ham.
 mushroom 3SG.POSS-OBL:PCP-be.many EMPH SENS-be now
 32545 'It is a (period) when mushrooms are many, now' (conversation, 16-08-11)

32546 The more common way of relativizing temporal adjuncts is by using finite
 32547 clauses followed by a temporal relator noun in 3SG possessive form such as *u-sŋi*
 32548 'the day when...' (95), *u-xpa* 'the year when...' (96), or *u-ray* 'the time when...' etc.

- 32549 (95) [[sl̥yzun tu] c^ho] [bmbiyuzun tu] u-sŋi
 lunar.eclipse exist:FACT COMIT solar.eclipse exist:FACT 3SG.POSS-day
 32550 nuunu, skyrma my-sna ra tu-ti-nuu ŋu
 DEM time NEG-be.good:FACT PL IPFV-say-PL be:FACT
 32551 'They said that the day when there is a lunar or a solar eclipse is not
 32552 auspicious.' (29-mWBZi, 175)

32553 When these prenominal relatives are used as temporal adjuncts in the main
 32554 clause, with or without (96) locative marking, they serve to express temporal
 32555 clause linking (§25.3.4.1).

- 32556 (96) [izora <maozhuxi> nuu-me] u-xpa nuunu, skyrtein
 1PL chairman.Mao AOR-not.exist 3SG.POSS-year DEM Venus
 32557 maje tu-ti-nuu puu-ŋgryl.
 not.exist IPFV-say-PL PST.IPFV-be.usually.the.case
 32558 'They say that the year when our Chairman Mao passed away, Venus did
 32559 not appear.' (29-LAntshAm, 89)

32560 23.5.10 Possessor

32561 Possessors of intransitive subjects and direct objects can be relativized using the
 32562 same relative constructions as their possessees. It is unclear whether possessors
 32563 of other arguments can be relativized (in particular possessors of transitive sub-
 32564 jects).

32565 23.5.10.1 Possessor of intransitive subject

32566 Possessors of intransitive subjects are relativized with subject participial clauses
 32567 (§16.1.1.5). In this construction, the subject of the clause is overt and takes an
 32568 obligatory possessive prefix, such as the 3PL *nua-* in (97).¹⁰

- 32569 (97) [nua-mtc^{hi} kui-dyn] nura
 3PL.POSS-mouth SBJ:PCP-be.many DEM:PL

32570 ‘Those who talk too much.’ (‘whose mouths are (too) many’) (24-qro, 121)

32571 The head noun can be overt as in (98), with determiner repetition (§23.3.5.1).

- 32572 (98) akui zuu [qapri ci u-kycl u-bruu kui-tu]
 32573 east LOC snake INDEF 3SG.POSS-top.of.head 3SG.POSS-horn SBJ:PCP-exist
 ci yzsu tce
 INDEF exist:SENS LNK
 32574 ‘In the east, there is a snake with a horn on his head.’ (2005, divitation,
 32575 44)

32576 Prenominal possessor relatives are also attested, but extremely rare, and the
 32577 third person possessive prefix on the possessee is required as in (99).

- 32578 (99) [u-cu kui-tu] rjyri pjy-cti
 3SG.POSS-additive SBJ:PCP-exist tsampa IFR.IPFV-be.AFF
 32579 ‘It was tsampa mixed with broad beans.’ (poor quality tsampa)
 32580 (2003-kWBra, 20)

32581 Subject possessor relative can also occur in apposition with another relative
 32582 clause, as in (100).

- 32583 (100) [u-mi kui-zuu~zri zo] [rkangraj kui-rmi]
 3SG.POSS-leg SBJ:PCP-EMPH~be.long EMPH ANTHR SBJ:PCP-be.called
 32584 ci pui-tu nua-ηu
 INDEF PST.IPFV-exist SENS-be
 32585 ‘There was someone called Rkangring, who had long legs.’ (2005
 32586 Kunbzang, 5)

32587 First or second person possessors can also be relativized, as in (101) and (102)
 32588 (see also 4, §6.1).

¹⁰This expression may be a nativized calque from Chinese 多嘴 <duōzui> ‘big mouth’.

23 Relative clauses

- 32589 (101) *azō [a-χti kuu-tu] pui-ŋu-a*
 1SG 1SG.POSS-companion SBJ:PCP-exist SENS-be-1SG
 32590 ‘I am someone who has a husband (whose husband is still alive, unlike
 32591 hers).’ (12-BzaNsa, 126)

32592 This type of relative can trigger either third person singular indexation, or
 32593 index the relativized element: both options (3SG *ŋu* ‘s/he/it is’ and 2SG *tui-ŋu* ‘you
 32594 are’) have been tested and are possible, as shown in example (102).

- 32595 (102) *[nryzo nry-mu nry-wa kuu-ts^hoz]*
 2SG 2SG.POSS-mother 2SG.POSS-father SBJ:PCP-be.complete
 32596 *ŋu/tui-ŋu*
 be:FACT/2-be:FACT
 32597 ‘You are someone both of whose parents are still alive.’ (elicited)

32598 In example (103),¹¹ the relativized element corresponds to the *third person com-*
 32599 *ponent* of the first dual (exclusive) possessive prefix *tci-* on the noun dyad *tci-mu*
 32600 *tci-wa* ‘our parents’ (§9.2.2.2).

- 32601 (103) *[tci-mu tci-wa kuu-naχtcuy]*
 1DU.POSS-mother 1DU.POSS-father SBJ:PCP-be.the.same
 32602 ‘Those whose parents are the same as mine.’ (140425 kWmdza02, 80)

32603 Although the verb *naχtcuy* ‘be the same’ can take a comitative argument (§8.2.5),
 32604 (103) is not an example of comitative relativization (§23.5.7); rather, the construc-
 32605 tion from which (103) has been relativized is the one in (104).

- 32606 (104) *tci-mpitc^hyz ra pui-naχtcuy*
 1DU.POSS-character PL SENS-be.the.same
 32607 ‘We have the same character = She has the same character as I.’
 32608 (12-BzaNsa, 58)

32609 In the participial relative taking *mr-kui-sy-mto* ‘the one that is not visible’ as its
 32610 main verb in (105), the head *smar* ‘river’ is not the possessor of the subject in the
 32611 proper sense, but the possessor of a noun (*w-βzur* ‘its side’) subject of a clause
 32612 embedded within another clause (headed by the participle *kui-fse* ‘that is like...’)
 32613 serving as the subject of *mr-kui-sy-mto* ‘the one that is not visible’.

¹¹The context of the relative clause (103) is found in example (91) (§23.5.8).

- 32614 (105) [maka tcekua ku-kuu-ru tce tcendi smar [[u-βzur
 at.all east IPFV:EAST-GENR:S/O-look LNK west river 3SG.POSS-side
 tc^hi kuu-fse ηu] kuu-fse] my-kuu-sy-mto zo]
 what SBJ:PCP-be.like be:FACT SBJ:PCP-be.like NEG-SBJ:PCP-PROP-see EMPH
 sc^hiz nu-azyut nu-ηu.
 APPROX.LOC AOR:WEST-reach SENS-be
 'He arrived at a river which was such that if one looked from one bank
 to the other side, what was on the other side was not at all visible.'
 (Divination 2005, 27)

This particularly convoluted example is however not representative of what is usually found in the corpus.

In (106), we find a prenominal relative containing another verb in subject participle form that can be interpreted a possessor relativization, as in (34): *u-ku-χsu kuu-me* ‘having no feeder’.

- 32625 (106) [u-pci kuu-r^vzi] [u-kuu-χsu kuu-me]
 3SG.POSS-outside SBJ:PCP-stay 3SG.POSS-SBJ:PCP-feed NMZL:S/A-not.exist
 32626 lu^llu y^vzu tce nuunu kupa kuu <yemao> tu-ti yu
 cat exist:SENS LNK DEM Chinese ERG wild.cat IPFV-say be:FACT
 32627 ‘There are cats that live outside, that nobody feeds, Chinese people call
 32628 them wild cats.’ (21-lWlu, 2)

However, there are cases of relative clauses with the subject participle of the negative existential verb *ku-me* and an *intransitive* verb in participial (or finite) form in the preceding complement clause, for instance *tr-ku-mbri* in (107). It is manifest that here the relativized element is neither the subject of *me* ‘not exist’ nor a possessor, but rather the subject of the verb of the complement clause *mbri* ‘cry, sing, make noise’ (see §23.5.11.4).

- 32635 (107) *pystcw nuu kumy [[tuu-yjyn ciny zo tx-kuu-mbri]*
 bird DEM also one-time even.one EMPH AOR-SBJ:PCP-make.noise
 32636 *kuu-me], nuu to-yyscrysct zo to-mbri juu-yu,*
 SBJ:PCP-not.exist DEM IFR-do.quickly EMPH IFR-make.noise SENS-be
 32637 ‘Even the bird, who had not even sung once (since coming to the palace),
 32638 immediately started singing.’ (2012 qachGa, 170)

The clause *tu-yjyn cinr zo tx-ku-mbri kuu-me* here is in fact the nominalized version of the postverbal negative construction (§22.5.4). In main clauses, this

construction combines a negative existential verb in impersonal (third singular) form with a complement clause in finite form. In (107), we see that when the intransitive subject of a postverbal negative construction is nominalized, both the matrix verb *me* ‘not exist’ and the verb of the complement clause *tr-kuu-mbri* occur in subject participle form (§23.5.11.4). This construction, though superficially similar to that in (106), is therefore different from it.

23.5.10.2 Possessor of object

Possessors of objects can be relativized with object participial relatives (108) or finite relatives (109) exactly like direct objects (§23.5.3), but like subject possessors, they require the possessee to be overt and to bear a possessive prefix (*u-sro&* ‘its life’ in 108 and *u-k^ho* ‘its house’ in 109).

- (108) *icq^ha [p̥yrt̪eu u-sro& kx-kx-ri] nui*
 the.aforementioned bird 3SG.POSS-life AOR-OBJ:PCP-SAVE DEM
to-t̪eyt t̪e
 IFR-take.out LNK

‘He took out (from his bag) the bird whose life he had saved.’ (140428
 yonggan de xiaocaifeng-zh, 74)

- (109) *[qro ta-fsraŋ] numu, [u-k^ho*
 ant AOR:3→3'-protect DEM 3SG.POSS-hive
mu=t^ha-sur-p^hut] nunura yuu nu=rjylpu (nui) kui, qro
 NEG-AOR:3→3'-CAUS-take.off DEM:PL GEN 3PL.POSS-king DEM ERG ant
rcañu, stoñtsu kumju zo jo-yut.
 UNEXP:FOC thousand five EMPH IFR-bring
 ‘The queen of the ants that he had saved, whose hive he had prevented
 from being destroyed (by his brothers) brought five thousand ants.’
 (140510 fengwang-zh, 103)

23.5.11 Relativization out of complement clause

Relativization of arguments and adjuncts out of complement clauses is possible in certain conditions.¹²

¹²For an example of arguments inside complements which *cannot* be relativized, see §15.2.10.6.

32665 23.5.11.1 Intransitive matrix verbs

32666 In the case of modal verbs taking subject complement clauses such as *ra* ‘be
 32667 needed’, ‘be necessary’ and *kʰu* ‘be possible’, subject participle clauses are at-
 32668 tested to relativize not the intransitive subject of these verbs (§23.5.1), but rather
 32669 arguments of the subject complement clause, including direct objects (110), 111)
 32670 or transitive subjects (112).

- 32671 (110) *tce jisŋi [[tua-tʰe]] kua-ra] ū-tu?*
 LNK today 2-ask[III]:FACT SBJ:PCP-be.needed QU-exist:FACT
 32672 ‘Is there anything you need to ask today?’ (conversation 17-08-21)
- 32673 (111) *[ky-nuutsuu kua-ra] ra kuuny tu-kua-nui-ti]*
 [[[INF-hide] SBJ:PCP-be.needed] PL also IPFV-SBJ:PCP-AUTO-say
 32674 *nunura tcayi tu-syrm̩i-nuu ñgryl.*
 DEM:PL parrot IPFV-call-PL be.usually.the.case:FACT
 32675 ‘People call ‘parrots’ those who say (everything), including things that
 32676 should (remain) hidden.’ (24-qro, 131)
- 32677 (112) *[ty-ryku tu-kua-nuu-ndza], [[turme ntsuu tua-nyjo-nui]*
 INDEF.POSS-crop IPFV-SBJ:PCP-AUTO-eat people always 2-wait:FACT-PL
 32678 *my-kua-ra], [koŋla turme kua-pur-pe zo]*
 NEG-SBJ:PCP-be.needed really people SBJ:PCP-emph-be.good EMPH
 32679 *a-nuu-tua-ŋβzu-nuu smuylm*
 IRR-PFV-2-become-PL prayer
 32680 ‘May you become nice people, who eat crops and do not need to wait
 32681 (ambush) for humans (to eat them).’ (Norbzang 2005, 438)

32682 In addition to core arguments, subject participial clauses are also used to rela-
 32683 tivize goals (113) and locative adjuncts (114).

- 32684 (113) *[[ce-a] kua-ra] nuu alo ñu*
 go:FACT-1SG SBJ:PCP-be.needed DEM upstream be:FACT
 32685 ‘(The place) where I have to go is upstream.’ (elicited)
- 32686 (114) *[[azo-suuso puu-nuu-pe-a] kua-kʰu] nuatcu*
 1SG-as.wish IPFV-AUTO-do[III]-1SG SBJ:PCP-be.possible DEM:LOC
 32687 *nuu-ce-a ñu*
 VERT-go:FACT-1SG be:FACT
 32688 ‘I am going back to a place where I can do as I like.’ (140426 jiagou he
 32689 lang-zh-zh, 78)

32690 23.5.11.2 Semi-transitive matrix verbs

32691 The subject participle of the semi-transitive *c^ha* ‘can’ can be used to relativize the
 32692 subject of the complement clause, when it is at the same time subject of *c^ha* itself,
 32693 as in (115) or in (122) below (§23.5.11.4).

- 32694 (115) [si [wuma tu-mbro] my-kui-c^ha] ci ηu tce,
 tree really IPFV-be.high NEG-SBJ:PCP-can INDEF be:FACT LNK
 32695 ‘It is a tree that cannot grow very high.’ (12-Zmbroko, 86)

32696 Objects in complement clauses are relativized with the object participle *ky-c^ha*
 32697 as in (116), which can in addition take a possessive prefix coreferent with the
 32698 transitive subject of the complement clause (§16.1.2.1). In (116) for instance, the
 32699 prefix *wu-* on *w-my-ky-c^ha* is coreferent with *qalias* ‘eagle’.

- 32700 (116) [[qalias kui, nykintu, nučimuma kui-suisu
 eagle ERG FILLER immediately SBJ:PCP-be.alive
 32701 c^hwu-nu-tsum] w-my-ky-c^ha] nunura
 IPFV:DOWNSTREAM-VERT-take.away 3SG.POSS-NEG-OBJ:PCP-can DEM:PL
 32702 ‘Those (the animals) that the eagle is not able to take away while they
 32703 are still alive.’ (150819 RarphAB, 1)

32704 23.5.11.3 Transitive matrix verbs

32705 With transitive complement-taking verbs such as *rpo* ‘experience’ (§24.5.6.1) or
 32706 *spa* ‘be able’ (§24.5.3.4), the subject participle occurs if the relativized element
 32707 is the (transitive or intransitive) subject of the complement clause, as in (117) or
 32708 (118).

- 32709 (117) pya [[ky-ruucmi] ur-kui-spa] ci
 bird INF-speak 3SG.POSS-SBJ:PCP-be.able INDEF
 32710 ‘A bird that is able to speak.’ (Norbzang 2005, 14)
- 32711 (118) [ky-ce] puu-kui-rpo pju-dyn-nuu ri
 INF-go AOR-SBJ:PCP-experience IFR.IPfv-be.many-PL LNK
 32712 ‘Many people have gone there (those who have gone there were many).’
 32713 (140514 huishuohua de niao-zh, 86)

32714 To relativize the direct object of a transitive verb in the complement clause, the
 32715 complement-taking verb can be in finite form (119) or in object participle form
 32716 (120), as if the complement-internal objects were the direct objects of the main
 32717 verb of the relative clause (§23.5.3).

- 32718 (119) [azo [ky-mto] puu-rpo-t-a] *tc^hemxpu ci tu*
 1SG INF-see AOR-experience-PST:TR-1SG girl INDEF exist:FACT
 32719 *tce,*
 LNK
 32720 ‘There is a girl whom I saw before and....’ (150819 haidenver-zh, 391)
- 32721 (120) [[*bm̥yrjwuy kuu ky-mtsuy*] puu-ky-rpo] *tuarme nu*
 mosquito ERG INF-bite AOR-OBJ:PCP-experience person DEM
 32722 ‘Someone who has been stung by mosquitoes before.’ (elicited)

32723 The contrast between *puu-kuu-rpo* in (118) and *puu-ky-rpo* (120) is not as straight-
 32724 forward as it might seem at first glance. The transitive verb *rpo* lacks non-generic
 32725 inverse forms, and treats both subjects and objects of its velar infinitive clauses
 32726 in the same way as transitive subject in the matrix clause, both in terms of inde-
 32727 xation and flagging (§24.5.6.1).

32728 23.5.11.4 Complement type

32729 The complements whose arguments or adjuncts are relativized can be either fi-
 32730 nite (110, 112, 113, 114, 115) or infinitival clauses (111, 117, 119), just like when the
 32731 complement-taking verbs are in finite form. In addition, the verb of the comple-
 32732 ment clause can also bear subject participle form if the relativized element is the
 32733 subject of the complement clause, as in (121) and (122) (see also §16.1.1.5, §16.1.1.6).

- 32734 (121) [[*sm̥rnk^haŋ kur-ce*] kur-ra] *yvzu.*
 hospital SBJ:PCP-go SBJ:PCP-be.needed exist:sens
 32735 ‘There are people (with nosebleed) who have to go to the hospital.
- 32736 (122) [[*kukki uu-ku-kur-ndun*] kur-c^ha] *ci ηu*
 DEM.PROX 3SG.POSS-IPFV-SBJ:PCP-read SBJ:PCP-can INDEF be:FACT
 32737 ‘She is someone who can read this.’ (2003ras, 48)

32738 Pairs of verbs in subject participle form should not necessarily be analyzed
 32739 as complement clauses embedded in relatives. In (123), *puu-kuu-nglut* ‘(bone) that
 32740 has been broken, fracture’ is not a (subject) complement of *kuk-t^hu* ‘the one that is
 32741 serious’ (which is not a complement-taking stative verb). Rather, *wuma zo puu-kuu-*
 32742 *nglut* *kuk-t^hu* is simply a head-internal relative clause (§23.4.3) with the subject
 32743 participle (itself a headless relative clause) *puu-kuu-nchlut* as its subject.

23 Relative clauses

- 32744 (123) [wuma zo [pu^h-ku^h-n^hgluat] ku^h-t^hu] nura q^he
 really EMPH AOR-SBJ:PCP-ACAU:break SBJ:PCP-be.serious DEM:PL LNK
 32745 ndyre, tc^ha^hcay tu-te q^he tce tu-xtcyr ηu.
 LNK splinter IPFV-put[III] LNK LNK IPFV-attach be:FACT
 32746 ‘The fractures that are serious, he puts a splinter on them and attaches
 32747 it.’ (140426 laxthab, 7)

23.5.12 Constraints on relativizability

32749 Table 23.1 summarizes the syntactic functions accessible to relativization in main
 32750 clauses in Japhug, indicating the clause types available for relativizing each func-
 32751 tion. The relatives can be headless in all cases, except that of possessor relativiza-
 32752 tion, where a possessive prefix on the possessee is required (§23.5.10). Intran-
 32753 sitive subjects and object are preferentially relativized with head-internal clau-
 32754 ses, while transitive subjects, goals and adjuncts are more often relativized by
 32755 prenominal clauses.

Table 23.1: Summary of relative clauses in Japhug

Function	Participial Clause			Finite Clause
	ku-	ky-	sy-	
S	✓			
possessor of S	✓			
A	✓			
O		✓		✓
possessor of O		✓		✓
semi-object		✓		✓
theme		✓		✓
goal		✓		✓
dative		✓		
comitative		✓		
instrument	(✓)		✓	
time adjunct		✓		✓ (prenominal)
locative adjunct		✓		✓ (prenominal)

Not all adjuncts are relativizable in Japhug: causees (§8.2.2.6), standards of comparative constructions (marked by the postpositions *srv* or *stav*, §8.2.7) and exceptive phrases in *ma* ‘apart from’ (§8.2.8) apparently cannot be relativized, following a well-known cross-linguistic generalization (Keenan & Comrie 1977).

In addition, relativization of the direct object of transitive verbs (in subject participle form) in the purposive clauses of motion verbs is not possible, as discussed in §15.2.10.6. Many arguments or adjuncts from complement clauses can be relativized (§23.5.11), but the limits on relativizability in embedded clauses is a topic for further fine-grained research.

23.6 Relative clauses and focalization

23.6.1 Pseudo-cleft constructions

Among the possible means of focalizing noun phrases, most if not all languages use an equative construction with a headless relative clause (or a relative clause with an overt head noun, if this head noun is different from the focalized noun phrase) in the topicalized position and the focalized noun phrase as the nominal predicate, as in English ‘[What matters] are his ideas’ or ‘[The thing that matters] is meaning’.

Such constructions are generally referred to as pseudo-clefts, by contrast with cleft sentences, a type of construction (such as English ‘It is **his ideas** [that matter]’) where the focalized noun is the head of the clause defining it, that clause being built like a relative, but sometimes presenting language-specific differences with relative clauses of the same type.¹³

Pseudo-cleft constructions in Japhug consist of a headless relative clause (generally with the determiner *nua* in topicalizing function, §9.1.5.4) followed by a nominal predicate with an affirmative (*ŋu* ‘be’, *cti* ‘be’) or negative (*maŋ* ‘not be’, §13.1.2) copula.

Pseudo-clefts in Japhug do occur in intransitive subject (124 and 160), direct object (125 and 126) or semi-objects (68, §23.5.4.1) functions.

- (124) [stu kua-mvku jy-kua-ye] nua rjylpu pjy-ŋu.
 most SBJ:PCP-be.before AOR-SBJ:PCP-come[II] DEM king IFR.IPFV-be
 ‘The one who came first was the king.’ (140514 xizajiang he lifashi-zh, 66)

¹³ Creissels (2006c: 123–124) points out for instance that in French clefting of dative phrases (*C'est à Jean que tu as donné le livre*) differs from the corresponding relativization (*La personne à laquelle tu as donné le livre*).

23 Relative clauses

- 32786 (125) *wi-ky-ndza nūmū nū tce, tu-ci w-iŋgū*
 3SG.POSS-OBJ:PCP-eat DEM DEM LNK INDEF.POSS-water 3SG.POSS-inside
 32787 *qajū nūra pū-ŋu rca ma*
 bugs DEM:PL SENS-be SFP LNK
 32788 ‘What (the otter) eats is aquatic animals, probably.’ (28-qapar, 90)

32789 When the predicate contains a first or second person pronoun, person indexation on the copula is obligatory (on the indexation rules of copulas, see §22.5.1.1).
 32790 In (126) for instance, replacing the copula in the predicate *n̄yzo tu-ŋu* by third
 32791 person form *†n̄yzo ŋu* would be completely ungrammatical.

- 32793 (126) *[azo a-ky-nū-rga] nū n̄yzo tu-ŋu tce*
 1SG 1SG.POSS-OBJ:PCP-APPL-like DEM 2SG 2-be:FACT LNK
 32794 ‘The one that I love is you.’ (160708 riquet5, 27)

32795 Pseudo-cleft used to focalize transitive subjects (127) are rare, and mainly con-
 32796 cerns instruments (§23.5.6) rather than agents.

- 32797 (127) *[wi-xt̄pa tu-kui-rqob] nū p̄xctʰyβ ŋu.*
 3SG.POSS-belly IPFV-SBJ:PCP-hug DEM belly.band be:FACT
 32798 ‘(The thing that) is attached around ('hugs') its belly is the belly band.’
 32799 (30-tAsno, 94)

32800 Oblique participles can be used in pseudo-clefts to focalize locative adjuncts
 32801 (128).

- 32802 (128) *ma [wi-sy-dyŋ] nū tcetu ruŋgu ŋu.*
 LNK 2SG.POSS-OBL:PCP-be.many DEM up.there pasture be:FACT
 32803 ‘The (place) where they are (most) numerous is up there on the pastures.
 32804 (17-xCAj, 85)

32805 Most pseudo-clefts are participial relatives as in the examples above, but there
 32806 are also finite object relatives (§23.5.3) as in (129).

- 32807 (129) *[tu-tu-mtsʰi] nuŋū, mbaly-pū ŋū-mab*
 IPFV-2-lead DEM OX-DIM SENS-not.be
 32808 ‘What you are leading is not a calf, (rather, it is...).’ (140512 fushang he
 32809 yaomo, 147)

32810 An alternative (and much rarer) type of pseudo-cleft has the headless relative
 32811 as the nominal predicate, as in (130).

- 32812 (130) *jv-yvwu matci tcendyre nuu [stu zo w-ky-nuzduw]* nuu
 IFR-cry because LNK DEM most EMPH 3SG.POSS-OBJ:PCP-worry DEM
 32813 *pjv-cti tce*
 IFR.IPFV-be.ADD LNK
 32814 ‘He cried because it was what he was most worried about.’ (140506 shizi
 32815 he huichang de bailingniao-zh, 65-66)

32816 Although pseudo-cleft constructions are well-attested in the corpus, they are
 32817 not the main morphosyntactic device to focalize constituents in Japhug. Other fo-
 32818 calizing constructions include sentence-final copulas (§22.5.3.2) and focus parti-
 32819 cles (§9.1.6). Some focalized noun phrases are also devoid of any specific marking
 32820 of focalization, even intonational ones (§22.1.2.3).

32821 23.6.2 Non-equative pseudo-cleft

32822 In addition, we find pseudo-cleft constructions whose second member is not a
 32823 nominal predicate with a copula, but rather a clause which could stand as a com-
 32824 plete sentence. The subject participle of *pe* ‘be good’ is commonly used in these
 32825 constructions in affirmative (*kui-pe* ‘what is good is that...’, ‘fortunately...’) or ne-
 32826 gative form (*ku-pe* ‘what is bad is that...’, ‘unfortunately...’) as in (131).

- 32827 (131) *[my-kui-pe] tce icq^ha, [ui-mu nuu,*
 NEG-SBJ:PCP-be.good LNK FILLER 3SG.POSS-mother 3SG.POSS-mother
 32828 *βdaŋmu nuu zatsa jv-si].*
 DEM queen DEM soon IFR-die
 32829 ‘Unfortunately (what is bad is that...), her mother, the queen, died early.’
 32830 (140504 baixuegongzhu-zh, 12-13)

32831 In such constructions, the (topicalized) participial clause is followed by the
 32832 linker *tce* in topicalizing function (§9.1.5.5) rather than the determiner *nuu*.

- 32833 (132) *tceri [my-kui-naχtcaw]* tce, *[ui-ndzruu yyzu].*
 but NEG-SBJ:PCP-be.similar LNK 3SG.POSS-claw exist:SENS
 32834 ‘What is different (between the footprints of the bear and those of a
 32835 small child) is that (the former) has claws.’ (21-pri, 37)

32836 23.7 Quantification

32837 Relative clauses are found in three quantificational constructions.

32838 First, correlative relative clauses occur with interrogative pronouns used as
 32839 free-choice indefinites (§23.2.5). In (133) for instance, the relative whose main
 32840 verb is the participle *kui-tu* has the pronoun *t^hi* ‘what’ in apposition with the
 32841 object participle *nr-kyr-t^hu* ‘(the things) that you ask’ as head, with the meaning
 32842 ‘any’ or ‘whatever’.

- 32843 (133) [[*nr-kyr-t^hu*] *t^hi kui-tu*] *tx-t^he*
 2SG.POSS-OBJ:PCP-ask what SBJ:PCP-exist IMP-ask[III]
 32844 *jry-o*
 be.possible:FACT-SFP
 32845 ‘Ask any/whatever question you (might) have.’ (conversation, 17-09-06)

32846 Second, totalitative reduplication (§12.4.1.5) indicates universal quantification
 32847 of the relativized element (§23.3.2). In particular, the reduplicated form of the
 32848 *kui~kui-tu* ‘all those that/who exist’ of the existential verb *tu* ‘exist’ can follow
 32849 nouns (134), with a meaning similar to the adverbial determiner *t^hamt^hrt* ‘all’
 32850 (§9.1.3.1).

- 32851 (134) *a-zda* *ra kui~kui-tu* *zo*
 1SG.POSS-companion PL TOTAL~SBJ:PCP-exist EMPH
 32852 *a-tx-buy-nuu* *smulym*
 IRR-PFV-miss.home-PL prayer
 32853 ‘May all of my companions miss home!’ (Norbzang 2005, 229)

32854 Constructions such as that in (134) originate from head-internal (or postnominal)
 32855 participial relatives ‘all my existing companions’). However, it is unclear
 32856 whether this analysis is still valid synchronically, and even whether *kui~kui-tu*
 32857 is still a participle. It may have been reanalyzed as a postnominal quantifier, as
 32858 suggested by the fact that it can occur with pronouns, as in (135), where an interpreta-
 32859 tion in terms of a relative clause, whether restrictive (‘all those of you who
 32860 exist?’) or non-restrictive (‘you, all the existing ones?’) is more difficult.

- 32861 (135) *nuwzora kui-kui-tu* *zo* *lx-nur-jyxt-nuu*
 2PL TOTAL~SBJ:PCP-exist EMPH IMP:UPSTREAM-VERT-turn.back
 32862 ‘Turn back and go to your homes.’ (Norbzang 2005, 225)

32863 Third, headless relative clauses (§23.4.1) in existential constructions (§22.5.1.2)
 32864 are more often used than indefinite pronouns (§6.6) to express non-specific indef-
 32865 itate entities, whether humans (‘someone’, 136) or inanimate ones (‘something’,
 32866 137).

- 32867 (136) [a-<diānhuā> u-kur-l̥t] y̥z̥u
1SG.POSS-phone 3SG.POSS-SBJ:PCP-release exist:SENS

32868 ‘There is **someone** calling me on the phone!’ (conversation, 22-08-2018)

- 32869 (137) sun̥g̥w̥ si u-mat a-pu-d̥n tce, nuu u-xpa
forest tree 3SG.POSS-fruit IRR-IPFV-be.many LNK DEM 3SG.POSS-year
32870 nuu nuu-rkun ma khro ky-mto māj-yi ma
DEM SENS-be.few LNK much OBJ:PCP-see NEG:SENS-come LNK
32871 [u-ky-ndza] y̥z̥u.
3SG.POSS-OBJ:PCP-eat exist:SENS

32872 ‘When there are many fruits on the trees in the forest, in those years the
32873 *Garrulax sp.* (*βmurcu*) are fewer because they do not come (where they
32874 can be) seen, because they have **something** to eat (in the forest).’
32875 (23-pGAYaR, 89)

32876 Head-internal relatives (§23.4.3) can have a similar meaning if their head noun
32877 is a generic noun like *turme* ‘person’ (§6.2.2), as in (138).

- 32878 (138) icq^ha [tūrme kua-n̥go] y̥z̥u tce, u-kur-rto^b
just.before person SBJ:PCP-be.ill exist:SENS LNK 3SG.POSS-SBJ:PCP-see
32879 jx-ari-a wo!
AOR-go[II]-1SG SFP
32880 ‘There is **someone** who is sick, I went to see him/her.’ (conversation,
32881 2013)

32882 Headless relative clauses also occur with a partitive meaning (some individuals
32883 among a group), as in (139). Note the difference in interpretation of the proposition
32884 *u-ky-ndza y̥z̥u* in (137) ‘it has something to eat’ and in (139) ‘there are some
32885 (fishes) that it eats’.

- 32886 (139) qajy c^ho qajuu u-ŋguuz kuny, [u-ky-ndza]
fish COMIT bugs 3SG.POSS-inside:LOC also 3SG.POSS-OBJ:PCP-eat
32887 y̥z̥u, [u-my-ky-ndza] y̥z̥u.
exist:SENS 3SG.POSS-NEG-OBJ:PCP-eat exist:SENS
32888 [u-ky-ny-mum], [u-my-ky-ny-mum]
3SG.POSS-OBJ:PCP-TROP-be.tasty 3SG.POSS-NEG-OBJ:PCP-TROP-be.tasty
32889 y̥z̥u.
exist:SENS
32890 ‘Among fishes and other marine animals, there are **some** that (whales)_i
32891 eat and **some** that they_i don’t eat, **some** that they_i find tasty and **some**
32892 that they_i don’t find tasty.’ (160703 jingyu, 21-23)

23 Relative clauses

Since Japhug lacks negative pronouns (§6.6), the only way to express a meaning corresponding to negative pronouns in Japhug is by combining a headless relative clause with a negative existential verbs (§13.4.2), as in (140).

- (140) *nx-kui-nuy-mu me*
2SG.POSS-SBJ:PCP-APPL-be.afraid not.exist:FACT
'Nobody is afraid of you!' (2002 qaCpa, 38)

Headless relative clauses in negative constructions are often embedded in a participial relative with the positive existential verb *tu* 'exist', as in (141).

- (141) *tceri [nura [u-cui-kui-p^but] ra kui-tu]*
LNK DEM:PL 3SG.POSS-TRAL-SBJ:PCP-take.off PL SBJ:PCP-exist
me ma
not.exist:FACT LNK
'But nobody picks (wild strawberries, because nobody likes to eat them).' (11-paRzwamWntoR, 90)

23.8 Relative vs. complement clauses

This section discusses constructions which present real or apparent ambiguity between relative and complement clauses, and proposes a few syntactic tests to disambiguate the two.

To the cases studied below, the adnominal complement clauses (§24.6), which resemble prenominal relatives (§23.4.2), must be added.

23.8.1 Ambiguity (finite clauses)

Finite relative clauses (§23.2.2), when they occur as objects or semi-object of verbs of perception (*mto* 'see', *mts^hym* 'hear' etc) or cognition (*tso* 'understand', 'know' etc) may not be easily distinguishable from complement clauses, as this type of verb can take either nominal objects/semi-objects or complement clauses, and both finite relatives and finite complements are found with the same demonstrative determiners *nua* and *nunu* (§23.3.5.2, §24.3.3).

For instance, in (142), the clause *mbrutcu la-tçyrt* (§23.5.3) can either be interpreted as a head-internal finite object relative clause (§23.4.3, §23.5.3) 'the knife that (the butcher) had unsheathed' or as a complement clause (§24.2.3) 'that (the butcher) had unsheathed his knife'. Both interpretations would make sense in the context (§24.4.1).

- 32922 (142) *spjan̥kua bñaz ni kuu numaa nyki, [mbruitçua la-tcxt]* *nua*
 wolf two DU ERG DEM FILLER knife AOR:3→3'-take.out DEM
 32923 *pa-mto-ndzi tce, wuma zo jy-mu-ndzi.*
 AOR:3→3'-see-DU LNK really EMPH IFR-be.afraid-DU
 32924 ‘The two wolves, seeing (that he had unsheathed his knife/the knife that
 32925 he had unsheathed), were very afraid. (150902 liaozhai lang, 31)

32926 Three criteria (already mentioned in §23.2.2) can however help disambiguating
 32927 between the two analyses in specific contexts.

32928 First, the presence of totalitative reduplication (§23.3.2) indicates that the sub-
 32929 ordinate clause can only be analyzed as a relative, as in (143).¹⁴

- 32930 (143) *stu kuu-xtci nua kua nura [tua~ty-amua-ti-ndzi] nua*
 most SBJ:PCP-be.small DEM ERG DEM:PL TOTAL~AOR-RECIP-say-DU DEM
 32931 *pjy-mts^hym.*
 IFR-hear
 32932 ‘The youngest (boy) heard all the things that they had said to each other.’
 32933 (160630 poucet1, 34)

32934 Second, finite subordinate clauses whose verb is in the Inferential, Sensory,
 32935 Egophoric, Irrealis or Imperative cannot be relative clauses. For instance *mu-pjy-*
 32936 *pe* in Inferential Imperfective must be a complement clause.

- 32937 (144) *tce uzo si ty-mda kósmaz ny nua*
 LNK 3SG die:FACT AOR-be.the.time only.then ADD DEM
 32938 *[mu-pjy-pe] nua ko-tso ri jy-maq^hu nua-nyu.*
 NEG-IFR.IPFV-be.good DEM IFR-understand LNK IFR-be.late SENS-be
 32939 ‘Just before dying, he understood that (what he had done) was not good,
 32940 but it was too late.’ (aesop nongfu yu she, 24)

32941 Third, finite relative clauses cannot relativize subjects, and therefore ‘plain’
 32942 intransitive verbs (excluding semi-transitive verbs §14.2.3 and verbs with goals
 32943 §14.2.4) cannot occur in finite relative clauses (except in the case of locative and
 32944 time adjunct relativization, §23.5.9). Therefore, clauses such as *mu-pjy-pe* ‘it was
 32945 not good’ in (144) and *tu-yawu* ‘it cries/howls’ in (145) cannot be interpreted as
 32946 subject relatives ‘(the thing) that was not good’ or ‘(the wolf) that howls’.

¹⁴The relativized element of this headless clause is the semi-object, see §18.4.2.1 on the argument structure of *amuti* ‘say to each other’.

- 32947 (145) *nua [tu-γywū] nur u-mts^hym pui-rpo-t-a*
 DEM IPFV-cry DEM 3SG.POSS-BARE.INF:hear AOR-experience-PST:TR-1SG
 32948 *ma*
 LNK
 32949 ‘I did hear (wolves) howl.’ (27-spjaNkW, 27)

32950 23.8.2 Ambiguity (non-finite clauses)

32951 Due to the resemblance between the velar infinitives *ku-* and *ky-* (§16.2.1) on the
 32952 one hand and the subject (§16.1.1.3) and especially object participles (§16.2.1.1),
 32953 distinguishing between infinitival clauses and participial relatives is not always
 32954 trivial.

32955 In (146), we find a series of non-finite verb forms in *ku-* and *ky-* in clauses that
 32956 are object of the complement-taking verb *fçrt* ‘tell’ (§24.2.1). Given the mean-
 32957 ing of this example, it could appear to be preferable to analyze these examples
 32958 as complement clauses, translating <*yazi*> *tx-ky-murkuu*, *tx-ky-ndza* as ‘(he told
 32959 him) that he had stolen and eaten a duck’ and *u-βri* ... *nua-kuu-łor* as ‘that his body
 32960 started itching, and that feathers started growing on it’.

- 32961 (146) *tce nura [pu~puu-kur-fse] nura, [<yazi>*
 LNK DEM:PL TOTAL~PST.IPFV-SBJ:PCP-be.like DEM:PL duck
 32962 *ty-ky-murkuu, ty-ky-ndza], q^he cyr tce [u-βri*
 AOR-OBJ:PCP-steal AOR-OBJ:PCP-eat LNK evening LOC 3SG.POSS-body
 32963 *tx-kuu-ryza] q^he, [u-βri tce icq^ha, <yazi>*
 AOR-SBJ:PCP-itch LNK 3SG.POSS-body LOC the.aforementioned duck
 32964 *yuu u-muj nua-kuu-łor], nura pju-fçrt.*
 GEN 3SG.POSS-feather AOR-SBJ:PCP-come.out DEM:PL IFR-tell
 32965 ‘He told (the old man) everything that had happened, **the duck that he**
 32966 **had stolen and eaten, and his body itching, and the duck feathers that**
 32967 **had grown on it.**’ (150904 maya-zh, 55-56)

32968 However, the problem with analyzing these clauses as infinitival complement
 32969 clauses is that the intransitive motion verb *łor* ‘come out’, being dynamic, never
 32970 takes a *ky-* infinitive, and that the form *nua-kuu-łor* can only be a subject participle
 32971 ‘(something) that has come out’. For this reason, the non-finite clauses in (146)
 32972 have to be analyzed as head-internal and headless (object and subject) participial
 32973 relative clauses.

32974 An analysis of clauses in *ky-* as infinitive complement clauses is restricted to
 32975 complement-taking verbs which unambiguously select *ky-* infinitives of plain
 32976 intransitive verbs (§16.2.1.1, §24.2.1).

23.8.3 Participial clauses in core argument function

Some verbs such as the verbs of pretence *zyypa* ‘pretend’ and *nuçpuuz* ‘pretend’ ‘disguise as’, ‘imitate’ select subject participle clauses as objects or semi-objects such as *kui-ngo* in (147), which could appear to be similar to the purposive complement of motion verbs (§24.4.2.1).

- (147) [kui-ngo] to-zyypa tce
 SBJ:PCP-be.sick IFR-pretend LNK
 ‘She pretended to be sick.’ (Nyima Wodzer 2002, 16)

However, there is clear evidence that these clauses are in fact headless relatives: (147) can literally be translated as ‘she pretended to be a sick person’. The difference with purposive clauses can be shown by three tests.

First, unlike motion verbs, pretence verbs can take nouns as objects (as shown by 148 and 156) instead of clauses with subject participles.

- (148) qacpa to-nuçpuuz, qacpa ui-rq^hu to-ŋga,
 frog IFR-pretend frog 3SG.POSS-skin IFR-wear
 ‘He disguised as a frog, he wore a frog’s skin.’ (2002 qaCpa, 10)

Second, these verbs can occur with a participial clause whose subject is overt and different from the subject of the verb of the matrix clause, as in (149) where *tr-pvtsø* ‘child’ is the subject of the verb *yvwu* ‘cry’ in the participial clause, but not the subject of *nuçpuuz* ‘pretend, disguise as, imitate’ (§24.4.2.3). Such a subject mismatch would be completely ungrammatical with a purposive clause.

- (149) [tr-pvtsø kui-yvwu] zo ky-nuçpuuz
 INDEF.POSS-child SBJ:PCP-CRY EMPH INF-imitate
 my-spe-a ma nuu muma spe-a
 NEG-be.able[III]:FACT-1SG LNK DEM apart.from be.able[III]:FACT-1SG
 ‘I cannot imitate a child crying, but apart from that I can imitate
 (anything).’ (27-kikakCi, 143)

Third, we find examples like (150) where the subject of the verb in the main clause is not coreferent with the subject of the participial clause but with the possessor of the subject. These cases can be accounted for as possessor relative clauses (§16.1.1.5, §23.5.10.1): (150) could thus be literally translated as ‘he pretended to be someone whose leg hurt’.

- (150) tce [ui-mi kui-mŋym] to-nuçpuuz
 LNK 3SG.POSS-leg SBJ:PCP-hurt IFR-pretend
 ‘He pretended to have a pain in the leg.’ (140426 lang yisheng-zh, 9)

33007 23.8.4 Relativized complement clauses

33008 In (151), the clause *sŋaŋspa kuu tu~ta-tut* ‘all (the things that) the sorcerer had said’
 33009 is a headless object finite relative (§23.5.3); the presence of totalitative reduplica-
 33010 tion in particular, shows that it cannot be interpreted as a complement clause
 33011 (§23.3.2).

- 33012 (151) *tceri [sŋaŋspa kuu tur-ta-tut] nuu to-stu*
 LNK sorcerer ERG TOTAL~AOR:3→3'-say[II] DEM IFR-do.like
 33013 ‘He did it everything the way that the sorcerer had said.’ (140511
 33014 alading-zh, 86)

33015 The syntactic function of this relative clause in the main clause is semi-object
 33016 of the secundative verb *stu* ‘do like’, which encodes the manner of the action as
 33017 semi-object, and the entity subjected to the action as the direct object (§14.4.2).

33018 In view of (151), it is tempting to analyze the clause “*nuu a-tr-fse nuu-ra*” *tr-tu-tut*
 33019 ‘(that) you said “it should be (done) like that”’ in (152), which occurs in the same
 33020 syntactic context, as a finite object relative clause too, differing from that of (151)
 33021 by being head-internal (§23.4.3) instead of headless.

- 33022 (152) *[["nuu a-tr-fse nuu-ra"] tr-tu-tut] nuu*
 DEM IRR-PFV-be.like SENS-be.needed AOR-2-say[II] DEM
 33023 *tr-stu-t-a nuu*
 AOR-do.like-PST:TR-1SG be:FACT
 33024 ‘I did it (the way that) you said should be done.’ (28-smAnmi, 333)

33025 What is remarkable about the construction in (152) is that the relativized ele-
 33026 ment is not a noun, but the (object) complement clause *nuu a-tr-fse nuu-ra* ‘it should
 33027 be (done) like that’, embedded within the relative.

33028 A common example of relativized complement clause is found when the transi-
 33029 tive perception verb *mtsʰym* ‘hear’ (§24.5.5) occurs with the object participle *ky-ti*
 33030 of the verb *ti* ‘say’ as in (153). In this example, *turme nuu ko-nurju* has a double
 33031 status: it is the object complement clause of *ky-ti* within the relative, and at the
 33032 same time, it constitutes the relativized element of the head-internal participial
 33033 clause (§23.5.3).

- 33034 (153) *[["turme nuu ko-nurju"] ky-ti] muu-puu-mtsʰam-a*
 person DEM IFR-have.pig.disease SBJ:PCP-say NEG-AOR-hear-1SG
 33035 ‘I have never heard that people get the pig disease.’ (25-khArWm, 90)

33036 The literal meaning of this construction can be conveyed in English as ‘I have
 33037 not heard “a man got the pig disease” being said’.

33038 24 Complement clauses

33039 24.1 Introduction

33040 This chapter, based on Sun’s (2012) work on Tshobdun and on earlier research on
33041 Japhug (Jacques 2008a; 2016a), presents an account of complement clauses and
33042 complementation strategies¹ in Japhug.

33043 This chapter comprises six sections. The first section following the introduc-
33044 tion §24.2 provides a classification of complement clauses based on the form of
33045 the main verb in the clause. Second, §24.4 presents an overview of complemen-
33046 tation strategies (including ambiguous relative clauses). Third, §24.3 analyses a
33047 certain number of morphosyntactic specificities of complement clauses (aside
33048 from verbal morphology) that distinguishes them from the corresponding inde-
33049 pendent clauses. Fourth, §24.5 surveys complement-taking verbs and describes
33050 the complement clause types and complementation strategies that they are com-
33051 patible with. Fifth, §24.6 discusses complement-taking nouns and noun-verb col-
33052 locations and how they differ from prenominal (§23.4.2) and genitival (§23.2.3)
33053 relative clauses. Finally, §24.7 briefly analyzes syntactic errors related to comple-
33054 mentation in the corpus.

33055 In this chapter, all complement clauses are systematically indicated between
33056 square brackets (with double embedding in some cases).

33057 The sections on participles (§16.1) and infinitives (§16.2) in a previous chapter
33058 partially overlap with some of the topics covered in this chapter.

33059 24.2 Complement types

33060 This section illustrates the different categories of complements attested in Ja-
33061 phug. Five main types of complement clauses are distinguished: velar infiniti-
33062 val complements, bare infinitival complements, finite complements, multicausal
33063 complements and reported speech. In addition, Japhug has many different com-
33064 complementation strategies, discussed in §24.4.

¹On the notion of complementation strategy, see (Dixon 2006: 34–40) and §24.4.

33065 24.2.1 Velar infinitive clauses

33066 Velar infinite clauses (§16.2.1) are one of the most common types of complement
 33067 clauses in Japhug (§16.2.1.5). Two velar infinitives are attested, *ku-* for stative
 33068 verbs and impersonal intransitive verbs, and *ky-* for dynamic and/or morpholog-
 33069 ically transitive verbs.

33070 A recurrent problem in the study of subordinate clauses in Japhug is the ambi-
 33071 guity between velar participles and infinitives (§16.2.1.1), making participial clau-
 33072 seses and infinitival clauses only distinguishable in specific contexts, and the ambi-
 33073 guity between complement clauses and relative clauses with some complement-
 33074 taking verbs (§23.8, §24.4.1). As a result, participial (§23.2.1) and finite relative
 33075 clauses (§23.2.2) are in some case difficult to differentiate from velar infiniti-
 33076 val complement clauses (§24.2.1) and finite complement clauses (§24.2.3), respec-
 33077 tively.

33078 24.2.1.1 Case marking

33079 While velar infinitives bear no person indexation markers, noun phrases receive
 33080 the same case markers in infinitive clauses as in independent clauses, showing
 33081 that infinitives have the same argument structures as finite verb forms.

33082 When an argument is shared between the complement and the matrix clause,
 33083 it does not necessarily have the same syntactic function in both clauses, as in
 33084 (1), where *trçime* ‘lady’ is transitive subject in the complement clause (see §14.4.2
 33085 on the argument structure of *stu* ‘do like’) and intransitive subject in the matrix
 33086 clause (§14.2.3).

- 33087 (1) [trçime nui kui nura ky-stu] *pjy-cʰa*
 princess DEM ERG DEM:PL INF-do.like.this IFR-can
 33088 ‘The princess succeeded in doing it.’ (140511 alading-zh, 252)

33089 In this sentence, the noun takes the ergative marker *kui* in accordance with the
 33090 verb of the complement clause (§8.2.2.1), showing that it belongs to the comple-
 33091 ment clause rather than to the matrix clause directly. This is the most commonly
 33092 observed pattern in Japhug texts: in infinitival clauses, the shared arguments
 33093 more often take the case marking selected by the verb of the complement clause
 33094 than that of the matrix clause.

33095 However, when the complement-taking verb is a stative verb, there are cases
 33096 where the ergative on the transitive subject is optional, as shown by (2) (without
 33097 ergative on *turme* ‘person’; Tshendzin has confirmed that this example is correct)
 33098 and (3) (with ergative). The precise conditions for this phenomenon still remain
 33099 to be investigated.

- 33100 (2) [uu-mat nuu ky-ndza] sna, [turme ky-ndza] sna
 3SG.POSS-fruit DEM INF-eat be.good:FACT people INF-eat be.good:FACT
 33101 ‘Its fruit is nice to eat, it is nice for people to eat.’ (09-stoR, 48)
- 33102 (3) [nuuu turme kuu ky-ndza] sna
 DEM people ERG INF-eat be.good:FACT
 33103 ‘It is nice for people to eat.’ (13-NanWkWmtsWG, 167)

33104 24.2.1.2 Coreference restrictions

33105 Coreference restrictions between the arguments of complement clauses with *ky-*
 33106 infinitives and their matrix clauses differ from verb to verb, and four cases can
 33107 be distinguished.

33108 First, in the case of impersonal verbs such as *ra* ‘be needed’, ‘be necessary’
 33109 (§24.5.3.1), there is no argument coreference between the matrix clause and the
 33110 complement clause. In this case, the arguments are neither indexed on the matrix
 33111 verb nor on the verb in the complement clause.

33112 Second, with a few transitive complement-taking verbs such as the transitive
 33113 *spa* ‘be able’ (§24.5.3.4) and the intransitive *n̪z* ‘dare’ (§24.5.3.5), coreference be-
 33114 tween the subject of the matrix clause and that of the complement clause is re-
 33115 quired.

33116 Third, a handful of verbs, including *suxch'a* (§24.5.3.3), the causative of *c'h'a* ‘can’
 33117 (§17.2.4.8), have coreference between the subject of the complement clause and the
 33118 *object* of the matrix clause.

33119 Fourth, for most verbs taking infinitives (like the semi-transitive *rga* ‘like’ or
 33120 the transitive *r̪o* ‘experience’), the subject of the matrix clauses can be corefer-
 33121 ential to either the subject of an intransitive verb (4), the subject of a transitive
 33122 verb (5), the object (6) and also possessors of core arguments (§24.5.6.1).

- 33123 (4) tsuku tce [ky-nurryyo] wuma zo rga-nuu tce
 some LNK INF-sing really EMPH like:FACT-PL LNK
 33124 ‘Some people like to sing.’ (26-kWrNukWGndZWr, 104) (S=S)
- 33125 (5) azo [qajuu nuara ky-n̪rtoχpjyt] puu-rga-a tce
 1SG bugs DEM:PL INF-observe PAST.IPFV-like-1SG LNK
 33126 ‘I liked to observe bugs.’ (26-quspunmbro, 15) (A=S)
- 33127 (6) maka [tu-ky-n̪jorjor], [tu-ky-fstyt] nuu puu-rga-nuu
 at.all IPFV-INF-flatter IPFV-INF-praise DEM IPFV-like-PL
 33128 ‘They like to be flattered or praised.’ (140427 yuanhou-zh, 53) (P=S)

24 Complement clauses

33129 Other types of complement clauses differ from velar infinitive clauses by their
33130 constraints on coreference (see §24.2.2.2).

33131 24.2.2 Bare infinitives and dental infinitives

33132 Complement clauses with bare (§16.2.2) and dental infinitives (§16.2.3) are less
33133 widespread than those with velar infinitive. Only a limited number of complement-
33134 taking verbs select them: phasal verbs (including *za* ‘begin’, *sraza* ‘begin’, *st^hut*
33135 ‘finish’, and *jry* ‘finish’), causative verbs derived from adjectives, the aspectual
33136 verb *rjo* ‘experience’ and the causative *supa* ‘cause to do’ (§24.5.1.3). With the
33137 exception of *jry* ‘finish’, these complement-taking verbs are all morphologically
33138 transitive.

33139 In the Tshobdun corpus Sun & Blogros (2019), the cognate verbs *je?* ‘begin’ and
33140 *joy?* ‘finish’ take velar infinitives, and there is no infinitival form comparable to
33141 the Japhug dental infinitive.

33142 24.2.2.1 Complementary distribution

33143 Bare and dental infinitives are found in complementary distribution. Bare infini-
33144 tives occur when the main verb of the complement clause is morphologically
33145 transitive (§14.3.1) as in (7).

- 33146 (7) *pxjk^hu pjui-si cuŋgu zo [u-ca u-ndzi]*
still IPFV-die before EMPH 3SG.POSS-flesh 3SG.POSS-BARE.INF:eat
33147 *tu-za-nui cti*
IPFV-start-PL be.AFF:FACT
33148 ‘(The lions) start eating its flesh before it dies (while it is still alive).’
33149 (20-sWNgi, 47)

33150 Dental infinitives on the other hand are found when the verb of the comple-
33151 ment clause is intransitive as in (8) (including labile verbs §14.5.1.1) or transitive
33152 with dummy subject (9) (§14.3.5).

- 33153 (8) *[azo a-ku (a-mytsa), tu-mŋym] ta-za*
1SG 1SG.POSS-head 1SG.POSS-MZCh INF:II-hurt AOR:3→3'-start
33154 ‘My head_i, cousin, when it_i starts hurting...’ (TaRrdo 2003 conversation)

- 33155 (9) *uu-muuntob nuu puu-ŋgra tce [uu-ŋgu]*
 3SG.POSS-flower DEM AOR-ACaus:cause.to.fall LNK 3SG.POSS-inside
 33156 *uu-mat tuu-βzu] na-za ri tce*
 3SG.POSS-fruit INF:II-make AOR:3→3'-start LOC LNK
 33157 'When its flower has fallen, and its fruit has started growing in the
 33158 inside...' (12-ndZiNgri, 118)

33159 Since most complement-taking verbs selecting dental infinitives are transitive,
 33160 case marking on the common subject can either be in the ergative or in the ab-
 33161 solutive (§24.3.2).

33162 24.2.2.2 Coreference restrictions

33163 Bare and dental infinitives strongly differ from velar infinitives as to their core-
 33164 ference restrictions. When the verb *r̥no* 'experience' occurs with velar infinitives,
 33165 the subject of the matrix clause can be coreferential with either the subject, the
 33166 object or even the possessor of the intransitive subject of the complement clause
 33167 (§24.5.6.1).

33168 The ambiguity between transitive subject or object coreference is particularly
 33169 clear with the verb *n̥ykʰu* 'invite' (to one's home as a guest, see examples 10 and
 33170 11), as with this verb both arguments are equal in terms of volition and control.

- 33171 (10) *[uzo kuu ky-n̥ykʰu] puu-r̥no-t-a*
 3SG ERG INF-invite AOR-experience-PST:TR-1SG
 33172 'I have been to his house as a guest.' (= 'He has invited me to come to his
 33173 house as a guest and I came.') (P=A)
- 33174 (11) *[uzo ky-n̥ykʰu] puu-r̥no-t-a*
 3SG INF-invite AOR-experience-PST:TR-1SG
 33175 'He has been to my house as a guest.' (= 'I have invited him to come to my
 33176 house as a guest and he came.') (A=A)

33177 In the case of bare infinitives, on the other hand, the subjects of the matrix and
 33178 complement clause must be coreferent, but the object of the matrix clause can
 33179 however be neutralized to third person.

33180 In example (12), the shared subject (referring to the host) is 3SG. The verb of
 33181 the matrix clause takes the complement clause as a 3SG object (hence the verb
 33182 takes the 3→3' form without 1SG marking), while the verb of the complement

24 Complement clauses

33183 clause takes a 1SG object (referring to the guest), marked by the possessive prefix
33184 *a-*.²

33185 (12) [a-nyrkʰu] *pa-rpo*
1SG.POSS-BARE.INF:invite AOR:3→3'-experience
33186 ‘I have been to his house as a guest.’ (= ‘He has invited me to come to his
33187 house as a guest and I came.’)

33188 (13) [uzo unyrkʰu] *pu-rpo-t-a*
3SG 3SG.POSS-BARE.INF:invite AOR-experience-PST:TR-1SG
33189 ‘He has been to my house as a guest.’ (= ‘I have invited him to come to my
33190 house as a guest and he came.’)

33191 This generalization is observed for all transitive verbs taking bare infinitive
33192 complement clauses. However, the intransitive impersonal verb *jyy* ‘finish’ takes
33193 the bare infinitive clause as intransitive subject, and remains in third person singular
33194 regardless of the subject and object of the complement clause, as in (14),
33195 where although the subject of the complement clause is third person plural, no
33196 plural marker can appear on *jyy*.

33197 (14) [nura u-ti] *to-jyy tce*
DEM:PL 3SG.POSS-BARE.INF:say IFR-finish LNK
33198 ‘After having finished saying that, (they went to the park)’ (140515
33199 congming de wusui xiaohai-zh, 15)

33200 With dental infinitives, the constraint subject coreference is the same, except in
33201 the case of transitive verb with dummy subject (example 9, §24.2.2.1), where the
33202 subject of the matrix verb is coreferent with the sole argument of the complement
33203 clauses, whose status is intermediate between that of a subject and an object
33204 (§8.1.4).

33205 24.2.3 Finite complements

33206 Complement clauses, like relative clauses (§23.2.2), can have a verb in finite,
33207 rather than infinitival form in Japhug and other Gyalrong languages. These con-
33208 structions are called ‘finite complement clauses’ in the present work, corres-
33209 ponding to Sun’s (2012: 475–477) ‘S-like (sentence-like) clauses’.³ This category

²In the English translation, the 1SG is rendered as a subject, because translating *a-nyrkʰu pa-rpo* as ‘He has invited me’ would be inexact, as this English sentence does not imply that the 1SG did attend the invitation.

³I chose ‘finite’ rather than ‘S-like’ to avoid confusion with ‘S’ as abbreviation for ‘intransitive subject’.

³³²¹⁰ excludes reported speech complement, which present different characteristics
³³²¹¹ ([§24.2.5](#)).

³³²¹² 24.2.3.1 TAME forms

³³²¹³ In finite clauses other than reported speech, TAME marking in the complement
³³²¹⁴ clause presents some restrictions. Of the 11 primary TAME categories ([§21.1](#)), only
³³²¹⁵ the Imperfective ([§21.2.4](#)) and the Factual Non-Past ([§21.3.1.3](#)) are compatible with
³³²¹⁶ most if not all verbs selecting finite complement clauses, regardless of the TAME
³³²¹⁷ category of the matrix verb. In (15) for instance, the verb of the complement
³³²¹⁸ clause is the Imperfective while that of the matrix clause is in the Aorist.

- ³³²¹⁹ (15) [azo a-ŋga ra tu-nui-ŋge-a, jyŋyt ju-nui-ce-a] ra
³³²²⁰ 1SG 1SG-clothes PL IPFV-AUTO-wear[III]-1SG toilet IPFV-AUTO-go-1SG PL
³³²²¹ tx-^ha-a
³³²²² AOR-can-1SG

'I am able now to wear clothes by myself and go to toilets by myself
 (again, after an accident).' (conversation, 17-08-21)

³³²²³ The Irrealis ([§21.4.1.4](#)) and Imperative ([§21.4.2.4](#)) are also found, but only with
³³²²⁴ modal auxiliaries such as *ra* 'be needed' as in (16). Unlike in Tshobdun ([Sun 2007b](#):
³³²²⁵ 807), verbs of cognition such as *suso* 'think' do not select the Irrealis; although
³³²²⁶ complement clauses in the Irrealis are found with these verbs, they are best ana-
³³²²⁷ lyzed in Japhug as reported speech ([§21.4.1.4](#), [§24.2.5](#)).

- ³³²²⁸ (16) ndyre [kui-xtcui~xtci a-mŋ-pú-wy-nui-clay]
³³²²⁹ LNK INF:STAT~be.small IRR-NEG-PFV:DOWN-INV-AUTO-drop
³³²³⁰ nui-ra ma rca nui nui-ndob q^he clas
³³²³¹ SENS-be.needed because UNEXP:FOC DEM SENS-be.brittle LNK at.once
³³²³² zo pjuu-ngrui nui-cti.
³³²³³ EMPH IPFV-ACAU:break SENS-be:AFF

'However, one should not let it drop even a little, otherwise, as it is very
 brittle, it would break at once.' (30-Com, 27)

³³²³⁴ Other TAME categories, such as Aorist ([§21.5.1.7](#)) or Inferential (18), are only
³³²³⁵ attested in the complement clause if the matrix verb is also in the Aorist or in
³³²³⁶ the Inferential, respectively.⁴ No semantic difference has yet been ascertained be-
³³²³⁷ tween Imperfective complements (15) and complements whose TAME category
 is copied from that of the matrix verb (17); the latter are considerably rarer.

⁴This constraint may not apply to complements of perception and cognition verbs such as *mto* 'see' ([§24.5.5](#)).

- 33238 (17) [kur-xtcu-xtci *ty-nvŋkutŋke-a*] *ty-cʰa-a.*
 SBJ:PCP-EMPH~be.small AOR-walk.around-1SG AOR-can-1SG
 33239 ‘I have become able to walk around a little bit (again, after an accident).’
 33240 (conversation, 17-08-21)

- 33241 (18) [zduam kui-ŋab *nui cʰy-suŋ-jyvt*] *pjy-cʰa*
 cloud SBJ:PCP-be.black DEM IFR:DOWNTREAM-CAUS-turn.back IFR-can
 33242 *nui-ŋu.*
 SENS-be
 33243 ‘He succeeded in making the black cloud retreat.’ (25-kAmYW-XpAltCin,
 33244 70)

33245 The TAME agreement between the matrix verb and the verb of the comple-
 33246 ment clause is not limited to Aorist and Inferential, and is also attested with
 33247 Irrealis and Egophoric Present, as in (19) and (20), respectively.

- 33248 (19) [*nunu a-ky-yut*] *a-pui-cʰa* *tce numuu pʰvn*
 DEM IRR-PFV:EAST-bring IRR-PFV-can LNK DEM be.efficient:FACT
 33249 ‘If he succeeds in bringing him, it will be efficient (to cure my disease).’
 33250 (2011-04-smanmi, 21)
- 33251 (20) [*nv-cqʰe* *smyn* *ku-tui-ndze*] *ur-kú-ra?*
 2SG.POSS-cough medicine PRS-2-eat[III] QU-PRS-be.needed
 33252 ‘Do you have to take medicine for your cough (now)?’ (conversation
 33253 2019-08-16)

33254 Examples like (17), (18) and (19) are not analyzable as serial verb constructions,
 33255 since subject coreference is not always observed, depending on the matrix verb
 33256 (§24.2.3.3).

33257 24.2.3.2 Coreference restrictions

33258 There are four different patterns of coreference restriction between the argu-
 33259 ments of finite complement clauses and those of the matrix verb.

33260 The first type includes verbs like *spa* ‘be able’ (§24.5.3.4), which require corefe-
 33261 rence between their subject and the (transitive or intransitive) subject of the com-
 33262 plement clause. In (21), both the verb of the complement clause and the matrix
 33263 verb are in 1SG→3 form, with 1SG coreference. The same coreference restriction
 33264 is observed when this verb takes a velar infinitive complement (§24.2.1.2).

- 33265 (21) [*<weixin> tu-lat-a*] *nura mūj-spe-a.*
 Wechat IPFV-release-1SG DEM:PL NEG:SENS-be.able[III]-1SG
 33266 ‘I am not able to use Wechat.’ (conversation, 17-03-27)

33267 The second type is represented by the semi-transitive complement-taking verb
 33268 *rga* ‘like’, which allows co-reference between its subject and either the (transitive
 33269 or intransitive) subject (22) or the object (23) of the complement clause (Jacques
 33270 2016a: 238).

- 33271 (22) [*nur ku-nu-ta-j*] *wuma zo rga-j*
 DEM IPFV-AUTO-put-1PL really EMPH like:FACT-1SG
 33272 ‘We like to put it (in the tea kettle to make tea).’ (30-macha, 11)
- 33273 (23) [*nyzo kuu tu-kui-nyjorjor-a*] *nura rga-a*
 2SG ERG IPFV-2→1-flatter-1SG DEM:PL like:FACT-1SG
 33274 ‘I like it when you flatter me.’ (elicited)

33275 The third type includes impersonal modal and aspectual verbs such as *ra* ‘be
 33276 needed’, ‘be necessary’ or *nts^{hi}* ‘have better’, which take their complement clause
 33277 as intransitive subject (§24.5.3.1. For instance, in (24), the modal auxiliary *nts^{hi}*
 33278 can only occur in 3SG form, and cannot take the 2SG indexation of the verb in
 33279 complement clause.

- 33280 (24) [*nyzo mylm zo pjw-tur-si*] *nts^{hi}*
 2SG absolutely EMPH IPFV-2-die be.better:FACT
 33281 ‘You must die!’ (140512 fushang he yaomo1-zh, 23)

33282 Fourth, verbs of perception and cognition such as *mto* ‘see’ (§24.5.5) have no
 33283 constraints on person indexation and neither require nor prohibit any corefe-
 33284 rence between main and complement clause.

33285 24.2.3.3 Finite complements vs. serial verb constructions

33286 Some complement-taking verbs such as *c^ha* ‘can’ occur with clauses sharing the
 33287 same subject and the same TAME category, as in (25). This could appear to be
 33288 analyzable as a serial verb construction (§25.1.5) or pseudocoordination (Lødrup
 33289 2014).

- 33290 (25) *qajdo nuu kuu [tua-ci ko-ts^{hi}] pjx-c^ha.*
 crow DEM ERG INDEF.POSS-water IFR-drink IFR-can
 33291 ‘The crow succeeded in drinking water.’ (aesop kouke de wuya-zh, 22))

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33292 However, I prefer to analyze these constructions are analyzed as a particular
33293 type of finite complements with TAME agreement between the matrix verb and
33294 the complement verb (§24.2.3.1).

33295 Subject coreference is not a specificity of this construction, but rather a prop-
33296 erty of the complement-taking verb (§24.2.3.2). With impersonal verbs such as
33297 *ra* ‘be needed’, which do not require subject coreference, TAME agreement is
33298 also attested, as in (26), where the verb *to-ti-nu* is in the Inferential (a category
33299 that does not normally occur in finite complement clauses, §24.2.3.2) by agreeing
33300 with the matrix verb *pjy-ra*.

- 33301 (26) [“ya” ny “ya” nuu to-ti-nuu] pjy-ra.

yes ADD yes DEM IFR-say-PL IFR.IPFV-be.needed

33302 ‘They had no other choice but to say ‘yes’.’ (140518 jinyin chengbao-zh, 57)

33303 Phasal verbs such as *za* ‘start’ and *st^hut* ‘finish’ (§24.5.6), which generally select
33304 bare/dental infinitives (§24.2.2), are marginally used in the construction, as in
33305 (§27).

- 33306 (27) [juuxco tc^hi ty-tui-nyma-t ty-tur-za-t] zo nuu, cyr
this.morning what AOR-2-do-PST:TR AOR-2-start-PST:TR EMPH DEM night
33307 myctṣa uzo ty-nyme ra
until 3SG IMP-do[III] be.needed:FACT
33308 ‘What you have started doing this morning, do it until the night.’ (140515
33309 jiesu de laoren-zh, 133)

33310 24.2.4 Multiclausal complements

33311 Complements are not always restricted to one single clause. Example (28) illus-
33312 trates a finite biclausal complement: *c^ha* ‘can’ (§24.5.3.2) has two complement
33313 clauses, the first of which *uu-mi pjuu-sui-xtse* specifies the manner of the second
33314 one (§25.4.1).

- 33315 (28) ma ju-mtsab bja zo ma nuu ma [[u-mi
LNK IPFV-jump completely EMPH LNK DEM apart.from 3SG.POSS-foot
33316 pjuu-sui-xtse] [tu-ŋke]] māj-c^ha
IPFV-CAUS-be.inserted[III] IPFV-walk NEG:SENS-can
33317 ‘It only jumps, as it is not able to walk by treading with its feet.’
33318 (28-qaCpa2, 4)

33319 Multiclausal infinitive complements are also found, as in (29), though they are
 33320 ambiguous with infinitive complements embedded within other infinitive com-
 33321 plements, as in (30) (a manner causative complement, §24.5.1.4) or complements
 33322 containing conversial manner clauses (§16.2.1.7).

- 33323 (29) [ky-nurtsu] [ky-ŋke] ra tx-cʰa
 INF-crawl INF-walk PL AOR-can
 33324 ‘When (the baby) has become able to crawl and walk.’ (140426 tApAtso
 33325 kAnWBdaR1, 67)

- 33326 (30) [[ky-ndza] ky-yy-nduiβ] míuj-kʰuu tce
 INF-chew INF-CAUS-be.minute NEG:SENS-be.possible LNK
 33327 lú-wy-sui-qioꝝ juu-ŋu tce
 IPFV-INV-CAUS-vomit SENS-be LNK
 33328 ‘(Dogs)_i cannot chew (*pΥγγxcaj*, a type of grass)_j into fine parts, and it_j
 33329 causes them to vomit.’ (140505 panaxCAj, 4)

33330 Another type of biclausal complement, exemplified by (31) and (32), comprises
 33331 an affirmative verb form, followed by its negative counterpart, expressing a dis-
 33332 junction ‘whether X or $\neg X$ ’.

- 33333 (31) [[u-ngra pe] [mx-pe]] nu, [[ky-nyma pe]
 3SG.POSS-salary good:FACT NEG-be.good:FACT DEM INF-work good:FACT
 33334 [mx-pe]] arytcʰa
 NEG-be.good:FACT be.determined.from:FACT
 33335 ‘Whether his salary is good or not is determined by/depends on whether
 33336 his work is good or not.’ (elicited)

- 33337 (32) [[u-spa rtaꝝ] [mx-rtaꝝ]]
 3SG.POSS-material be.enough:FACT NEG-be.enough:FACT
 33338 tx-z-rytcʰe
 IMP-CAUS-be.determined.from[III]
 33339 ‘Determine (the quantity of clothes that you are going to make)
 33340 depending on whether the (quantity of) cloth is enough or not.’ (elicited)

33341 With bare and dental infinitives, multiclausal complements are only attested
 33342 in the simultaneity construction (§24.5.1.3).

33343 24.2.5 Reported speech

33344 Verbs of speech (such as *ti* ‘say’ or *fçrt* ‘tell’) and cognition (in particular *suso*
 33345 ‘think’, ‘want’) can take reported speech complements, in which the speaker ei-
 33346 ther (exactly or partially) reproduces a sentence uttered by the person he is quot-
 33347 ing, or verbalizes the words he assumes a person is thinking. These clauses have
 33348 finite verb forms, and are thus a sub-category of finite complement clauses, but
 33349 present some properties distinguishing them from the complements studied in
 33350 §24.2.3.

33351 24.2.5.1 Sentence final particles

33352 Reported speech clauses stand out among complement clauses in have no restric-
 33353 tion on the verb form, in particular in terms of TAME (§24.2.3.1), and also in their
 33354 ability to occur with sentence final particles, which are otherwise never found in
 33355 subordinate clauses, including relatives, complements and other types of clauses
 33356 .

33357 For instance, the complement clause in (33) contains the imperative/hortative
 33358 particle *je* (§10.4.1) as well as an interjection, and in (34) we find the utterance
 33359 mitigation particle *loβ* (§sec:fsp.attitude).

- 33360 (33) “ja, *t^huu-numbjam-nuu je*” *to-ti*.
 INTERJ IMP-warm.by.fire-PL SFP IFR-say

33361 ‘She said: ‘Come on, get warm by the fire!’ (160703 poucet3-v2, 27)

- 33362 (34) *t^y-t^huu nuu kuu “nuu mx-n^ytsa loβ*” *to-ti*,
 INDEF.POSS-son DEM ERG DEM NEG-be.appropriate:FACT SFP IFR-say
 33363 *k^hro muu-to-k^huu*.
 much NEG-IFR-agree
 33364 ‘The boy said ‘This is inappropriate’ and did not agree (to marry her).
 33365 (150828 donglang, 56)

33366 24.2.5.2 Hybrid indirect speech

33367 While Japhug allows direct speech quotation, the corpus reveals examples of mis-
 33368 matches between the viewpoint of the original speaker (the person whose speech
 33369 or thoughts are quoted, subject of the complement-taking verb of speech/thought
 33370 which selects the reported speech clause) and the current speaker (the person
 33371 quoting the words of the original speaker).

33372 In the present work, these phenomena are referred to as Hybrid Indirect Speech
 33373 (Jacques 2016a following Tournadre (2008)).⁵ In Hybrid Indirect Speech, the verb
 33374 morphology (in particular person indexation) invariably presents the viewpoint
 33375 of the original speaker, while pronouns and adverbs follow that of the current
 33376 speaker.

33377 Since grammatical relations are mainly marked by verb morphology and overt
 33378 pronouns are not common (§6.1), distinguishing between Direct Speech and Hy-
 33379 brid Indirect Speech is only possible in a minority of cases. Mismatch between
 33380 pronouns and person indexation only occurs when a pronoun or possessive pre-
 33381 fix is overt and when at least one argument in the sentence is referred to by a
 33382 different person form by the original speaker and the current speaker.

33383 Example (35) provides an example of this phenomenon. The verb *nuyi* ‘he
 33384 comes/will come back (home)’ in the complement clause of the verb *ky-suso*
 33385 ‘think’ is in the Factual Non-Past 3SG. In the same clause we find the 2SG pronoun
 33386 *nyzo*; there is no pause between the pronoun and the verb, and no indication from
 33387 the prosody that *nyzo* is left-dislocated.

- 33388 (35) *ma ny-wa kuu [nyzo nuyi] ky-suso kuu kʰa*
 LNK 2SG.POSS-father ERG 2SG come.back:FACT INF-think ERG house
 33389 *wi-rkuu tce bmasχ sui-tyxuar pa-sui-lyt*
 3SG.POSS-side LNK soldier three-circle ARO:3→3'-CAUS-release
 33390 *cti tce*
 be.AFF:FACT LNK

33391 **Direct:** ‘Your father, thinking ‘[He is coming back](#)’, put three circles of
 33392 soldiers around the house.’

33393 **Indirect:** ‘Your father, thinking that [you are coming back](#),’

33394 **Hybrid indirect:** ‘Your father, thinking that ‘[you](#)’ is coming back’,
 33395 (qachGa 2003, 154)

33396 This type of mismatch between pronouns and indexation on the verb is anomalous
 33397 and never found in independent sentences. Here the verb form corresponds
 33398 to the point of view of the original speaker (indicated in blue in all following ex-
 33399 amples), whose original sentence would have been *wzo nuyi* (3SG come.back:FACT
 33400 ‘he is coming back’). The pronoun reflects the point of view of the current speaker
 33401 (in red), for whom the equivalent sentence would be converted to *nyzo tuu-nuyi*
 33402 (2SG 2-come.back:FACT ‘you are coming back’), since the addressee of the current
 33403 situation corresponds to the subject of the original situation.

⁵ Aikhenvald (2008) also uses the term ‘Semi-Indirect Speech’.

Examples (36a), (36b) and (38) illustrate that possessive prefixes on nouns undergo the same shift towards the point of the view of the current speaker, while the verb remains in the same form that was either thought or uttered by the original speaker.

In (36a) and (36b), the possessive forms *wi-tcwu* ‘his son’ and *wi-pi*‘her brother’ underwent a shift to third person (representing the point of view of the current speaker). The original sentences corresponding to the complement clauses in (36a) and (36b) are presented in (37a) and (37b): the possessive pronoun is first person and coreferential with the subject of the main verb.

- (36) a. *rgytpu nuu kuu “wi-tcwu nuu a-nuu-xtuay-a” jny-suso*
 old.man DEM ERG 3SG.POSS-son DEM IRR-PFV-meet-1SG IFR-think
 cti
 be.AFF:FACT

Direct: ‘The old man thought “I wish I could meet my son”’;

Indirect: ‘The old man_i wanted to meet his_i son.’

Hybrid indirect: ‘The old man_i thought I_i wish I_i could meet his_i son’’;
 (150908 menglang-zh, 40)

- b. *tcendyre ta-zi nuu kuu [wi-pi*
 LNK INDEF.POSS-younger.sibling DEM ERG 3SG.POSS-elder.sibling
 yuu wi-sci tu-nyme-a ra] jny-suso
 GEN 3SG.POSS-revenge IPFV-make[III]-1SG be.needed:FACT IFR-think
 tce,
 LNK

Direct: ‘The (younger) sister thought “I have to get revenge on my brother”’;

Indirect: ‘The (younger) sister_i wanted to get revenge on her_i brother.’

Hybrid indirect: ‘The (younger) sister_i thought I_i have to get revenge on her_i brother’’; (xiong he mei, 17)

- (37) a. *a-tcwu nuu a-nuu-xtuay-a (ra)*
 1SG.POSS-son DEM IRR-PFV-meet-1SG be.needed:FACT
 ‘I wish I could meet my son.’ (elicitation based on 36a)
- b. *a-pi yuu wi-sci tu-nyme-a*
 1SG.POSS-elder.sibling GEN 3SG.POSS-revenge IPFV-make[III]-1SG
 ra
 be.needed:FACT
 ‘I have to get revenge on my brother.’ (elicitation based on 36b)

33432 Example (38) illustrates the same phenomenon as in (36a) and (36b), but with
 33433 the verb of speech *ti* ‘say’ instead of *suso* ‘think’. In this example, we know from
 33434 the context that the girl is the addressee, so that if the sentence were in direct
 33435 speech, a second person singular prefix form *nv-kumtchuu* (2SG.POSS-toy) ‘your
 33436 toy’ would be expected instead.

- 33437 (38) *txcime nuu kuu pjui-tu-mts^hym tce, [numu w-kumtc^huu nuu*
girl DEM ERG IPFV-CONV:IMM-hear LNK DEM 3SG.POSS-toy DEM
 33438 *ju-yuat-a ηu] w-kua-ti pjx-tu ndyre,*
IPFV-bring-1SG be:FACT 3SG.POSS-SBJ:PCP-say IFR.IPFV-exist LNK
 33439 Direct: ‘As soon as the girl heard that there was someone saying “**I will**
 33440 **bring your toy**”:
 33441 Indirect: ‘As soon as the girl heard that there was someone saying that
 33442 **he would bring her toy**.
 33443 Hybrid indirect: ‘As soon as the girl_i heard that there was someone
 33444 saying “**I will bring her_i toy**”: (140429 qingwa wangzi-zh, 49)

33445 In (39), one could be tempted to analyze the pronoun *wzo* ‘he’ as exterior to the
 33446 reported speech clause, as the subject of the matrix verb *suso* ‘think’. However,
 33447 since *suso* is transitive and requires its subject to be marked with the ergative
 33448 (§8.2.2.1), this analysis is not possible. Instead, *wzo* ‘he’ belongs to the comple-
 33449 ment clause whose verb *r_zi* ‘remain, stay’ is intransitive. The person mismatch,
 33450 as in (35) above, is due to Hybrid Indirect Speech: the verb form *mu-pu-r_zi-a*
 33451 with first singular marking reflects the viewpoint of the original speaker (the
 33452 subject of the verb *jnu-nuu-susym*), while the pronoun *wzo* ‘he’ corresponds to
 33453 that of the current speaker (the narrator of the story).

- 33454 (39) “*wzo χsuu-sŋi χsy-rzaš ma mu-pu-r_zi-a*”
 33455 3SG three-day three-night apart.from NEG-PST.IPFV-stay-1SG
juu-nuu-susym pjx-ηu
IPFV-AUTO-think[III] PST.IPFV-be
 33456 Direct: ‘He was thinking “**I have only stayed** for three days and three
 33457 nights”.
 33458 Indirect: ‘He was thinking that **he had only stayed** for three days and
 33459 three nights.’
 33460 Hybrid Indirect: ‘He was thinking that **he have only stayed** for three
 33461 days and three nights.’

A potentially even more confusing case occurs when the original speaker is the current speakers' addressee, and when both the original and the current speakers are referred to in the original utterance. This is the situation observed in (40), a sentence pronounced by a fox who helped a prince to succeed in various tasks. Here, the first singular possessive prefix *a-* on the possessed noun *u-tṣunlyn* 'favour' and the first person singular suffix *-a* on the verb *nui-nui-fsuy-a* do not correspond to the same referent. The verb form *nui-nui-fsuy-a* 'I will pay back' is the sentence that the fox attributes to his addressee (the prince), so that the first person here corresponds to the prince, while the possessive prefix on *u-tṣunlyn* 'favour' reflects the point of view of the fox and thus refers to himself.

- (40) *a-tṣunlyn nui-nui-fsuy-a u-nui-tui-susym ny, nui*
 1SG.POSS-favour IPFV-AUTO-pay.back-1SG Q-IPFV-2-think[III] LNK DEM
ty-ste ti nui-ŋu
 IMP-do.this.way[III] say:FACT SENS-be

Direct: 'If you think "*I will requite the favour (which I received from you)*', do like that.'

Indirect: 'If you want to *requite the favour (which you received from me)*, do like that.'

Hybrid Indirect: 'If you think "*I will requite the favour (which you received from me)*, do like that.'

In such a situation, the referents corresponding to first and second person are exactly reversed between the point of view of the current and the original speaker, and therefore between pronouns and possessive prefixes on the one hand and verbal indexation on the other hand.

The corresponding sentence in Direct speech would be (41), with a second person singular possessive prefix on the noun *u-tṣunlyn* 'favour' instead.

- (41) *ny-tṣunlyn nui-nui-fsuy-a*
 2SG.POSS-favour IPFV-AUTO-pay.back-1SG
 'I will requite the favour (which I received from you).'

Surprisingly, despite this complex shift of perspective between the original speaker and the current speaker, there is no logophoric pronoun in Japhug (Hagège 1974; Nikitina 2012). A logophoric pronoun is however attested in the closely related Stau language, which appears to have a similar system of Hybrid Indirect Speech (Jacques et al. 2017).

Hybrid indirect speech is not rare in Japhug, and this grammar contains additional examples, such as (90) in §10.4.4).

24.3 Morphosyntactic properties of complement clauses

24.3.1 Word order and constituency

Complement clauses, are strictly preverbal in Japhug like other core arguments (§22.1.1), except in the case of right dislocated constituents (§22.1.3) such as the infinitive clause *ky-sy-fstun* ‘to serve’ in (42) (§24.5.7).

- (42) *tc^{hi} tu-tuu-ste* *ŋu*, [*ky-sy-fstun*]
 what IPFV-2-do.like[III] be:FACT INF-APASS-serve
 ‘How do you treat people?’ (2002 qaCpa, 128)

While complement clauses are generally located directly before the verb, in examples such as (43) the subject of the matrix verb inserted after the complement clause.

- (43) *[nŋzo ky-cui-nŋo]* *azo mui-puu-c^ha-a*
 2SG INF-CAUS-be.defeated 1SG NEG-IPFV-can-1SG
 ‘I cannot defeat you anymore.’ (140513 abide he mogui-zh, 85)

Discontinuous complement clauses are rare in Japhug. The only clear example in the corpus is (44). In this example, the 1sg pronoun *azo* is the subject of the matrix clause, and has no syntactic role in the complement clause, but it appears between the transitive subject *lulu ku* ‘the cat’ and the object *ŋmuz* ‘two’ of the complement clause. Despite the rarity of this construction, this sentence was not considered to be unusual by Tshendzin when listening again to the recording.

- (44) *[lulu ku azo ŋmuz zo ka-ndo]* *pui-mto-t-a*
 cat ERG 1SG two EMPH AOR:3→3'-take AOR-see-PST:TR-1SG
 ‘I saw a cat catching two of them.’ (22-kumpGatCW, 61)

24.3.2 Case marking

When the verb of the matrix and the complement clauses sharing the same subject have different transitivity values, there is a conflict in case assignment on their common subject, which can either take absolute (§8.1.1) or ergative marking (§8.2.2).

Examples (45) and (46) provide a minimal pair illustrating this optional treatment. In both examples, the matrix verb *rga* ‘like’ is semi-transitive (and its subject cannot take ergative marking), while *ndza* ‘eat’ is transitive (and thus requires a subject with the ergative).

33524 In (45), the subject *fsapar̥ ra* ‘domestic animals’ has no ergative marking, showing
 33525 that its case marking is assigned by the semi-transitive *rga* ‘like’ (§14.2.3), and
 33526 therefore that the infinitival complement clause in this example is restricted to
 33527 the sole infinitive verb form *kx-ndza* ‘to eat’.

- 33528 (45) *fsapar̥ ra [kx-ndza] wuma rga-nu*
 animals PL INF-eat very like:FACT-PL
 33529 ‘Domestic animals like to eat it.’ (19-qachGa mWntoR, 116)

33530 By contrast, in example (46), the common subject *pas̥ ra* ‘pigs’ takes the ergative
 33531 *kua* selected by the transitive verb *ndza* ‘eat’ in the complement clause, sug-
 33532 gesting that it should be analyzed as belonging to the complement clause.

- 33533 (46) *[pas̥ ra kua kx-ndza] wuma zo rga-nu*
 pig PL ERG INF-eat very EMPH like:FACT-PL
 33534 ‘Pigs like to eat it.’ (12 ndZiNgri, 149)

33535 In (46) it is not possible to argue that the case marking on the subject is a case
 33536 of long-distance ergative (§8.2.2.2), since *pas̥ ra kua* does not serve as subject for
 33537 a transitive verb located a few clauses afterwards; in fact there is no mention of
 33538 the pigs in the rest of the text.

33539 Examples (47) and (48) with dental infinitive complements (§24.2.2) contain-
 33540 ing an intransitive verb (§16.2.3) and the transitive matrix verb *za* ‘start’ illustrate
 33541 the opposite situation: the transitive verb requires the ergative on third person
 33542 subjects (§8.2.2), while the intransitive one precludes it. In (47), the common sub-
 33543 ject is in the absolute, showing that it owes its case marking to the intransitive
 33544 verb *ŋke* ‘walk’, and therefore that it belongs to the complement clauses.

- 33545 (47) *[<xinbada> nu tce li tu-ŋke] to-za*
 Sinbad DEM LNK again INF-walk IFR-begin
 33546 ‘Sinbad started to walk again.’ (140511 xinbada-zh, 217)

33547 In (48), the common subject is in the ergative following the transitive matrix
 33548 verb *za* ‘begin’ (§24.5.6.2), and is thus located outside of the complement clause.

- 33549 (48) *pyxtcu nu kua [nuacimuma zo tu-narryyo] cʰy-za*
 bird DEM ERG immediately EMPH INF-sing IFR-begin
 33550 ‘The bird immediately started to sing.’ (140514 huishuohua de niao-zh,
 33551 221)

33552 In the case of transitive matrix verbs such as *r̩io* ‘experience’ that allow co-
 33553 reference between the subject of the matrix clause and either the subject or ob-
 33554 ject of the complement clause, the common argument receives ergative marking
 33555 even when it is object in the complement clause, as illustrated by example (169)
 33556 (§24.5.6.1).

33557 24.3.3 Determiners

33558 Finite (§24.2.3), reported speech (§24.2.5) and infinitive (§24.2.1) comple-
 33559 ment clauses, like relative clauses (§23.3.5.2), are often followed by *n̩u* and *nun̩u* (49)
 33560 (which occur as demonstrative pronouns and determiners, §6.9, §9.1.2, §9.1.5.4,
 33561 §9.1.4.3) and/or by the plural marker *ra* (50) (§9.1.1.2), which adds the nuance
 33562 that other activities may be implied. For instance, in (50), *n̩u-nuqambuumbjom ra*
 33563 *múj-spe* can be glossed as ‘it is not able to fly (and do other related activities)’.

- 33564 (49) [m̩-k̩-ce] n̩u m̩-k̩n̩u ri
 NEG-INF-go DEM NEG-be.possible:FACT LNK
 33565 ‘(I) have no choice but to go.’ (Norbzang 2005, 267)

- 33566 (50) s̩t̩c̩n̩a n̩u ju-r̩xtye k̩u-fse q̩e, tu-ŋke ma
 ground DEM IPFV-measure.by.span INF:STAT-be.like LNK IPFV-walk LNK
 33567 n̩u ma [n̩u-nuqambuumbjom] ra m̩új-spe
 DEM apart.from IPFV-fly PL NEG:SENS-be.able[III]
 33568 ‘The (inchworm) moves (in a motion like) it were measuring the ground
 33569 span by span, and otherwise it is not able fly.’ (26-qambalWla, 80)

33570 These markers are analyzed in this grammar as determiners of the entire com-
 33571 plement clause rather than as complementizers, the analysis proposed by Sun
 33572 (2012: 481) concerning a similar construction in Tshobdun. As evidence for the
 33573 analysis as determiners, note that the position of the markers *n̩u* and *ra* rela-
 33574 tive to complement clauses is exactly the same as that between demonstrative
 33575 and plural determiners and nouns in a noun phrase (§9.1.2). In particular, cirm-
 33576 composed determiners are attested with complement clauses as in (51), where the
 33577 reported speech complement *t̩ç̩eme j̩r̩-yut-a* ‘I brought a girl’ is both preceded
 33578 and followed by plural markers.⁶

⁶Examples like (51) directly refute my previous claim (Jacques 2016a: 258) that determiners of complement clauses are strictly postclausal.

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- 33579 (51) *nura [tc^heeme jy-yuit-a] ra muu-to-ti.*
DEM.PL girl AOR-bring-1SG PL NEG-IFR-say
‘He did not say that he had brought a girl (and the related events).’
(150909 hua pi-zh, 55)

33582 Bare and dental infinitival clauses (§24.2.2) rarely take the determiners *nuu* and
33583 *ra*, but examples such as (52) are attested in the corpus.

- 33584 (52) *[py^ytcu ra tui-mbri] ra ta-za-nuu puu-ts*
bird PL INF:II-cry PL AOR:3→3-start-PL PST.IPFV-have.time.to
33585 ‘(The solar eclipse) lasted enough time for the birds to start crying (as if it
33586 were night).’ (29-RmGWzWn, 34)

24.3.4 Restrictive and additive focus

33588 Various focus markers are inserted between the complement clause and the
33589 matrix verb, including the additive/scalar focus marker *kuny* ‘also, even’ (§9.1.6.1)
33590 in (53).

- 33591 (53) *[ky-nuu-βlui] kuny mx-sna*
INF-AUTO-burn also NEG-be.good:FACT
33592 ‘It is not even good to be burnt (as firewood).’ (11-qarGW, 116)

33593 In (54), the exceptive construction *ma nuu ma* ‘apart from that’ (§8.2.8) located
33594 between the infinitival clause *ky-mts^hym* and the matrix verb has a different status
33595 from *kuny* in (117), as the matrix verb *puu-rno-t-a* (AOR-experience-PST:TR-1SG) in
33596 affirmative form can be inserted after the complement clause (*ky-mts^hym puu-rno-*
33597 *t-a ma nuu ma muu-puu-rno-t-a*) and its absence in (54) is due to elision.

- 33598 (54) *[ky-mts^hym] ma nuu ma muu-puu-rno-t-a*
INF-hear LNK DEM apart.from NEG-AOR-experience-PST:TR-1SG
33599 ‘I only heard about it.’ (I did not see it and even do not claim that it exists,
33600 of a mythological animal) (20-RmbroN, 118)

24.3.5 Raising of preverb orientation

33602 With the exception of finite complements and some velar infinitives (§16.2.1.2),
33603 verbs in complement clauses generally lack orientation preverbs, and only the
33604 matrix verb encodes orientation.

24.3 Morphosyntactic properties of complement clauses

While some complement-taking verb keep the same orientation regardless of the complement type and the lexical orientation of the verb in the complement clause (for instance, *rno* ‘experience’ always takes the orientation DOWNWARDS, §24.5.6.1), other matrix verbs, in particular causative verbs (§24.5.1.4) and phasal verbs such as *za* ‘begin’ (§24.5.6.2), select the orientation of the complement verb. This phenomenon is illustrated in Table 24.1 and the following examples.

Table 24.1: Examples of raising of preverb orientation from the complement clause of *za* ‘begin’, Inferential 3SG(→3’)

Orientation	Example		Dental/bare inf. + <i>za</i> ‘begin’	
upwards	<i>to-mna</i> ‘s/he got better’	(213), §21.5.2.4	<i>tuu-mna to-za</i> ‘s/he started getting better’	(55)
downwards	<i>pjr-fçrt</i> ‘s/he told it’	(127), §16.1.3.7	<i>w-fçrt pjr-za</i> ‘s/he started telling it’	(56)
upstream	<i>lo-fsoꝝ</i> ‘the day broke’	(68), §24.4.2.1	<i>tuu-fsoꝝ lo-za</i> ‘the day started breaking’	(57)
downstream	<i>cʰyr-lrt</i> ‘s/he played’ (the flute)	(151), §15.1.5.8	<i>w-lrt cʰyr-za</i> ‘s/he started playing’ (the flute)	(58)
eastwards	<i>ko-rjaꝝ-ndzi</i> ‘they danced’		<i>tuu-rjaꝝ ko-za-ndzi</i> ‘they started dancing’	(59)
westwards	<i>jyr-munmu</i> ‘s/he moved’		<i>tuu-munmu jyr-za</i> ‘s/he started moving’	(60)

As shown in Table 24.1, the orientation preverb on *za* in examples (55) to (60) (in all of these cases a D-type preverb marking the Inferential, §15.1.1.1) is the same as that found when the verb in the complement clause is used as a main verb conjugated in the Inferential.

- 33615 (55) *tuu-mna to-za tce*
 INF:II-be.better IFR:UP-start LNK
 ‘He started getting better.’ (150907 yingning-zh, 56)

- 33617 (56) *w-χpi w-fçrt pjr-za.*
 3SG.POSS-story 3SG.POSS-BARE.INF:tell IFR:DOWN-start
 ‘He started telling her a story.’ (140517 buashuohua-zh, 69)

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- 33619 (57) *tuu-fsob lo-za tce*,
 INF:II-be.light IFR:UPSTREAM-start LNK
 33620 ‘The day broke.’ (150819 haidenver-zh, 121)
- 33621 (58) *juli ui-lyt cʰy-za*
 flute 3SG.POSS-BARE.INF:release IFR:DOWNSTREAM-start
 33622 ‘He started playing the flute.’ (140513 mutong de disheng-zh, 151)
- 33623 (59) *tuu-rjaš ko-za-ndzi*
 INF:II-dance IFR:EAST-start-DU
 33624 ‘They started dancing.’ (140504 huiguniang-zh, 147)
- 33625 (60) *tuu-muanmu ny-za*
 INF:II-move IFR:WEST-start LNK
 33626 ‘It started moving.’ (150904 yaoshu-zh, 83)

33627 When an orientable verb (§15.1.2) is found in the complement clause, *za* can
 33628 take the indefinite orientation preverbs as in (61).

- 33629 (61) *li tuu-ce jo-za*
 again INF:II-go IFR:INDEFINITE-start
 33630 ‘He started going.’ (140511 xinbada-zh, 285)

33631 The verb *za* ‘begin’ can also be used with nominal objects as in (62).

- 33632 (62) *rryo cʰy-za*
 song IFR:DOWNSTREAM-start
 33633 ‘It started singing (began a song).’ (140519 yeying-zh, 80)

33634 If the object in question has a corresponding denominal verb, such as *nurryo*
 33635 ‘sing’ from *rryo* ‘song’ (§20.7.1), the same orientation preverb that *za* takes when
 33636 used with the base noun will be the same as that selected by the corresponding
 33637 denominal verb: for instance, DOWNSTREAM is found in both cases in (62) and
 33638 (63).

- 33639 (63) *pyxtciu nuu kuu nučimuma zo tuu-nurryo cʰy-za*
 bird DEM ERG immediately EMPH INF-sing IFR:DOWNSTREAM-start
 33640 ‘The bird immediately started singing.’ (140514 huishuohua de niao, 221)

33641 All phasal verbs (§24.5.6.2) and causative complement-taking verbs behave like
 33642 *za*. Additional examples of this phenomenon with *st'ut* ‘finish’ are presented in
 33643 §24.5.6.2.

33644 24.4 Complementation strategies

33645 Dixon (2006) introduces the term ‘complementation strategy’ to refer to construc-
 33646 tions with a meaning corresponding to that expressed by complement clauses in
 33647 some languages, but which either are not core arguments or the verb of the main
 33648 clause or are not clauses with a complete argument structure (Dixon 2006: 34–
 33649 40). Complementation strategies include nominalizations (when the verb sheds
 33650 its argument structure as it becomes a noun), relative clauses (which are formally
 33651 a modifier of a core argument), serial verb constructions and clause linking.

33652 24.4.1 Relative clauses in core argument function

33653 Some complement-taking verbs can alternatively select (semi-)objects instead of
 33654 complement clauses. For instance *cʰa* ‘can’ occurs with the noun 考试 <kǎoshì>
 33655 ‘exam’ (borrowed from Chinese) (64).

- 33656 (64) <*kaoshi*> *pui-cʰa*
 exam AOR-can
 33657 ‘He succeeded the exam.’ (12-BzaNsa, 76)

33658 In (65), the clause *tua~ta-tut* superficially resembles a finite complement clause
 33659 (§24.2.3), but four pieces of evidence indicate that it should rather be analyzed
 33660 as a headless relative clauses in semi-object function like the noun <*kaoshi*> in
 33661 (64).

- 33662 (65) *tr-pytso tua kua nura [tua-ta-tut] nura*
 INDEF.POSS-child DEM ERG DEM:PL TOTAL~AOR:3→3'-say[II] DEM:PL
 33663 *pjy-cʰa*
 IFR-can
 33664 ‘The child had succeeded in doing everything that (the old king) had said.’
 33665 (140428 yonggan de xiaocafeng-zh, 256)

33666 First, the subject of both clauses are not co-referential (this example cannot
 33667 be interpreted as meaning ‘the boy succeeded in saying all these things’). If the
 33668 subordinate clause in (65) were a complement, subject coreference would be ex-
 33669 pected (§24.2.3.2). Second, the verb of the relative clause has totalitative redu-
 33670 plication, a morphological device found in relative clauses (§23.3.2), but not in
 33671 complement clauses. Third, the verb of the relative clause is in the Aorist while
 33672 that of the the main clause is in the Inferential; in finite complement clauses other
 33673 than reported speech, the verb could be in the Aorist only if the matrix verb were

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33674 in Aorist form too (see §24.2.3.1). Fourth, it is possible to add an overt head noun
33675 in (65).

33676 Correlative relative clauses (§23.2.5) particularly commonly occur as objects
33677 or semi-objects. For instance, in (66) the clause *wi-wa tɔ^hi tr-stu-t-a* to be analyzed
33678 as the semi-object of the secundative verb *stu* ‘do like’ (§14.4.2, §24.5.7).

33679 (66) [wi-wa tɔ^hi tr-stu-t-a] nuu tu-ste-a
3SG.POSS-father what AOR-do.like-PST:TR-1SG DEM IPFV-do.like[III]-1SG

33680 *nuu-łɔs*
 SENS-be.needed

33681 ‘I have to deal with him in the same way as I dealt with his father. (=How
33682 I treated his father, I have to treat him like that)’ (Norbzang 2012, 160)

33683 Ambiguity between finite or participial relative clauses on the one hand, and
33684 finite and infinitival complement clauses on the other hand, is pervasive in the
33685 case of verbs of cognition and perception such as *mto* ‘see’ (§23.8.1, §23.8.2) as
33686 in (67), where *tr-ky-ta* can be either analyzed as an object participle (§16.1.2) or a
33687 velar infinitive (§24.2.1). Disambiguation between the two analyses is possible
33688 when the verb is dynamic intransitive (§23.8.2).

33689 (67) *nuacimuma zo icq^ha* [*kum nutcu wi-ftas*
immediately EMPH the.aforementioned door DEM:LOC 3SG.POSS-mark
33690 *tr-ky-ta]* *nuu pjy-mto*
PDV-INF/OBJ:PCP-put DEM IFR-see

33691 ‘She immediately saw the mark that had been put on the door / that
33692 someone had put a mark on the door.’ (140512 alibaba-zh, 183)

33693 24.4.2 Participial clauses

33694 Putting aside participial relative clauses used with verbs compatible with both
33695 nouns and complement clauses (§24.4.1, §23.8.2), participial clauses are found in
33696 four types of complements and complementation strategies: purposive clauses,
33697 constructionalized object relative clauses, essive participial clauses and genuine
33698 participial complements.

33699 24.4.2.1 Purposive clauses of motion verbs

33700 The motion verbs *ce* ‘go’, *yi* ‘come’ and *łɔs* ‘come out’ (§15.1.2.1) select purposive
33701 clauses whose verb is obligatorily in participle form (§15.2.10).⁷ The participles

⁷This construction reminds of the use of the future participle with motion verbs in Ancient Greek (Vernhes 1996: §177.B).

in this construction cannot take orientation, polarity and associated motion prefixes.

Both subject and object purposive clauses are found. Subject purposive clauses are subject participial clauses (§16.1.1.6), as in (68) and (69). In this construction, there is obligatory coreference between the subject of the motion verb and that of the purposive clause, unlike other superficially similar constructions (§24.4.2.3).

- (68) *lo-fsoꝝ tce tce tꝫ-mu nu [u-tcui
IFR-be.bright LNK LNK INDEF.POSS-mother DEM 3SG.POSS-son
u-kui-car] c^hy-ce tce,
3SG.POSS-SBJ:PCP-search IFR:DOWNSTREAM-go LNK*
'When the sun came up (in the morning), the mother went to look for her son.' (tWJo 2012, 33)

- (69) *pri nu [u-zda u-kui-car] jo-łox.
bear DEM 3SG.POSS-companion 3SG.POSS-SBJ:PCP-search IFR-come.out
'The bear came out to look for its companion (another bear).' (elicited)*

To express coreference with the *object* of the purposive clause (in the case of a transitive verb), the object participle is normally used instead (§16.1.2.6). Coreference between the object of the complement clause and the subject of the matrix clause is possible only if the object has control over the action as in (70); control of the subject of the purposive clause is not necessary in this case.

- (70) *[k^hro kꝫ-mto] míj-yi ma u-kv-ndza yżzu.
much OBJ:PCP-see NEG:SENS-come LNK 3SG.POSS-OBJ:PCP-eat exist:SENS
'(In the years when there are a lot of things to eat in the forest), it_i does not come to (places where it_i can) be seen, because it_i has things to eat.'* (23-pGAYaR, 89)

There is however at least one unexplained exception. The verb *nuflymtc^hyt* 'ask to perform a task' (71) consistently occurs in *subject* participle form in the purposive construction in the meaning 'go/come to perform a task (upon someone's invitation)', where coreference is thus between the subject of the motion verb and the object of the transitive verb. The *kv-* participle is also acceptable with motion verbs, but this construction is not attested in texts. This problem deserves additional research.⁸

⁸ Another puzzling feature of this construction is the fact that there is no obligatory possessive prefix of the , and that when present, it indexes the subject rather than the object.

24 Complement clauses

- 33730 (71) *azø þlama tʂ-nuþlymtc^hat-a*
 1SG lama AOR-ask.to.perform.a.task-1SG
 33731 ‘I asked a lama to perform a (ceremony) for me.’ (elicited)
- 33732 (72) *kui-nuþlymtc^hyt ce-a ra*
 SBJ:PCP-ask.to.perform.a.task go:FACT-1SG be.needed:FACT
 33733 ‘(Their lama said:) ‘I have to go to perform (a ceremony upon someone’s
 33734 invitation).’ (160720 kandZislama, 5)

33735 When the verb in the subject purposive clause is transitive, the participle has
 33736 a possessive prefix coreferent with the object as in the case of relative clauses
 33737 (§16.1.1.1), and the subject can either take absolute marking following the mo-
 33738 tion verb (which is morphologically intransitive), as in (68), or ergative marking
 33739 following the verb of the purposive clause as in (73). This difference in case mark-
 33740 ing can be analysed as reflecting clausal structure: in (73), the subject *tʂ-rjɪt rɑ* ‘the
 33741 children’ belongs to the purposive clauses, whereas in (68), the subject *tʂ-mu nu*
 33742 lies outside of it.

- 33743 (73) *wi-fso-soz tce, [tʂ-rjɪt ra kui nu]*
 3SG.POSS-tomorrow-morning LNK INDEF.POSS-child PL ERG DEM
 33744 *wi-kui-car] jo-ce-nu* *nw-ŋu tce*
 3SG.POSS-SBJ:PCP-search IFR:UPSTREAM-go SENS-be LNK
 33745 ‘The morning of the next day, the children went (there) to look for him.’
 33746 (Norbzang, 325)

33747 The goal of the motion verb can however occur within the purposive clause,
 33748 as in (74), where the subject in ergative form *wi-wa nu kui* ‘his father’ is stranded
 33749 from the transitive verb *wi-kui-n-nyjo* by the goal *k^hapa tce* ‘downstairs’.

- 33750 (74) *[wi-wa nu kui k^hapa tce wi-kui-n-nyjo]*
 3SG.POSS-father DEM ERG downstairs LOC 3SG.POSS-SBJ:PCP-AUTO-wait
 33751 *pjy-yi.*
 IFR:DOWN-come
 33752 ‘His father came downstairs to wait for him.’ (140506 loBzi, 5)

33753 Motion verb with purposive clauses have some semantic overlap with the
 33754 corresponding associated motion prefixes (§15.2.1); the functional difference be-
 33755 between the two constructions is discussed in §15.2.10.

33756 Apart from the three motion verbs above, a few verbs expressing imminent
 33757 aspect such as *ayuyu* ‘be about to’ also selects participial clauses (§24.5.6.3), as
 33758 shown by (75).

- 33759 (75) *kui-maq^hu tce, tv-tcuu nur [kui-si] to-rvŋgat*
 SBJ:PCP-be.after LNK INDEF.POSS-son DEM SBJ:PCP-die IFR-be.about.to
 33760 ‘The man was about to die.’ (2002 rkongrgjal2, 24)

33761 While there is potential ambiguity between purposive clauses and headless
 33762 participial relative clauses (§23.4.1) used with motion verbs, in practice ambiguous
 33763 sentences are not common in the corpus, as the presence of determiners such
 33764 as the indefinite *ci* in (76) suffices to show that the participial clause can only be
 33765 a relative and is not interpretable as a purposive clause (however *u-kui-mts^hi jv-yε*
 33766 without the determiner could indeed be parsed as ‘s/he came to lead it’).

- 33767 (76) *[ts^hyt u-kui-mts^hi] ci jv-yε tce*
 goat 3SG.POSS-lead INDEF AOR-come[II] LNK
 33768 ‘Someone leading a goat came.’ (chen-pear, 15)

33769 24.4.2.2 Purposive clauses of manipulation verbs

33770 Manipulation verbs such as *tsum* ‘take away’ or *yut* ‘bring’ (§15.1.2.2) occur with
 33771 non-finite purposive clauses in *kv-*, as in (77), rather than subject participles like
 33772 the motion verbs (§24.4.2.1) despite obligatory subject coreference.

- 33773 (77) *u-mbro u-ndzi nura [kv-ntsye] jo-tsum*
 3SG.POSS-horse 3SG.POSS-skin DEM:PL OBJ:PCP-sell IFR-take.away
 33774 ‘He took the horses’ skins to (the market) to sell them.’ (150814 kelaosi-zh,
 33775 85)

33776 The non-finite verb form *kv-ntsye* could in principle be either analyzed as an
 33777 infinitive or as an object participle (§16.2.1.1). Unlike infinitival clauses, the *kv-*
 33778 clauses in this construction can be optionally followed by quantifiers as in (78)
 33779 and by the relator noun *u-spa* ‘material’ as in (79) and (80).

33780 In addition, all of these examples present coreference between the object of the
 33781 transitive verb of the main clause and that of the participial clause, reminiscent
 33782 of the use of object participles in the purposive clauses of motion verb to express
 33783 coreference between the intransitive subject of the motion verb and the object
 33784 of the transitive verb of the purposive clause (see example 70 in §24.4.2.1 above
 33785 and §16.1.2.6).

- 33786 (78) *kutcu rca [kv-ntsye] u-kuxtcuu~xtco*
 DEM.PROX:LOC UNEXP:FOC OBJ:PCP-sell 3SG.POSS-EMPH~basket
 33787 *ju-yuat-nuu cti.*
 IPFV-bring-PL be.AFF:FACT
 33788 ‘(People) bring many basketfulls (of mushroom) to sell.’ (23-mbrAZim, 111)

24 Complement clauses

- 33789 (79) *[ky-sat] u-spa jō-wy-tsuum nui-ŋu.*
 OBJ:PCP-kill 3SG.POSS-material IFR-INV-take.away SENS-be
 33790 ‘He was taken away to be executed.’ (tou dongxi de xiaohai-zh, 17)
- 33791 (80) *turme nui kui laχtcʰa [ky-ntsye] (u-spa)*
 person DEM ERG thing OBJ:PCP-sell 3SG.POSS-material
 33792 *kui-duu~dyn jo-yut.*
 SBJ:PCP-EMPH~be.many IFR-bring
 33793 ‘The man brought a lot of things to sell.’ (elicited)

33794 These clauses are (at least historically) to be analyzed as participial clauses
 33795 in essive function (§8.1.7): *ky-ntsye* (*u-spa*) and *ky-sat* (*u-spa*) in the examples
 33796 above literally mean ‘(bring/take away) as something to be sold/as someone to
 33797 be killed’, hence their use in purposive function. This construction is not specific
 33798 to manipulation verbs: in (81), the verb of the main clause *χsu* ‘raise’, ‘feed’ is also
 33799 found with the same type of participial clause.⁹

- 33800 (81) *pas nura ko luuski, [ca ky-ndza] u-spa*
 pig DEM:PL ADVERS of.course meat OBJ:PCP-eat 3SG.POSS-material
 33801 *ku-χsu-nui pjy-ŋu ri*
 IPFV-feed-PL IFR.IPFV-be LNK
 33802 ‘The pigs, of course, people raise them for their meat.’ (150820 kAnWCkat,
 33803 29)

33804 24.4.2.3 Constructionalized participial relative clauses

33805 The verbs of pretense select subject participial relative clauses as objects or semi-
 33806 objects.¹⁰

33807 The status of the clauses with subject participles occurring with these verbs,
 33808 though superficially similar to the purposive clause (§24.4.2.1), is however en-
 33809 tirely distinct: these clauses are not specific constructions, but simply headless
 33810 relative clauses in object or semi-object function. This is shown by the fact that
 33811 the same verbs are also found with participial head-internal clauses as in (82),
 33812 where the three nouns *pyṛtcu* ‘bird’, *kʰuna* ‘dog’ and *lulu* ‘cat’ are intransitive
 33813 subjects of the participial clauses, and are not coreferent with the subject of their

⁹In (81) however, the object of *ky-ndza* is not coreferent with that of the main verb, unlike what is found with the manipulation verbs.

¹⁰Unlike the cases discussed in §24.4.1, these verbs cannot take genuine complement clauses, and require participial relatives.

³³⁸¹⁴ matrix verb *tu-nuçpuuz*. This example can be literally translated as ‘it is able to
³³⁸¹⁵ imitate a singing bird, a barking dog and a meowing cat.’ (see also §23.8.3).

- ³³⁸¹⁶ (82) *wi-zda* *nura, [[pyxtcau kui-yywu], [k^huna kui-ndzut],*
 3SG.POSS-companion DEM:PL bird SBJ:PCP-cry dog SBJ:PCP-bark
³³⁸¹⁷ *[lwalu kui-yywu] kui-fse,* *nura tu-nuçpuuz] puu-spe*
 cat SBJ:PCP-cry INF:STAT-be.like DEM:PL IPFV-imitate SENS-be.able[III]
³³⁸¹⁸ ‘It is able to imitate other animals, sing like a bird, bark like a dog, meow
³³⁸¹⁹ like a cat or call like a fox.’ (27-kikakCi, 141)

³³⁸²⁰ 24.4.2.4 Participial complements

³³⁸²¹ In addition to the constructions studied above, subject participles also occur in
³³⁸²² a handful of syntactic contexts where an infinitival complement is normally ex-
³³⁸²³ pected; I call these clauses ‘participial complements’.

³³⁸²⁴ The velar infinitive + existential verb construction expressing impossibility
³³⁸²⁵ (§16.2.1.6) has a variant with Imperfective subject participles, as in (83).

- ³³⁸²⁶ (83) *tu-kui-yi* *ny-yi-me* *q^he,*
 IPFV:UP-SBJ:PCP-come IFR-CAUS-not.exist LNK
³³⁸²⁷ ‘She made it impossible for her to come out (again).’ (2003-kWBRA, 97)

³³⁸²⁸ In addition, when a complement-taking verb is itself in the subject participle
³³⁸²⁹ form, it is possible for the complement either to be in the expected form (infinitive
³³⁸³⁰ or finite), or to be in subject participle form itself. For instance, in example (84)
³³⁸³¹ the subject participle *kui-c^ha* ‘the one who can’ takes a complement whose verb
³³⁸³² is a subject participle with a possessive prefix coreferent with the object (*ndzi-*
³³⁸³³ *kui-syndu*), instead of the expected *k^y-* infinitive (or finite clause).

- ³³⁸³⁴ (84) *[[rŋual kui ndzi-kui-syndu]* *kui-c^ha]* *kui-fse*
 silver ERG 3DU-SBJ:PCP-exchange SBJ:PCP-can SBJ:PCP-be.like
³³⁸³⁵ *pur-pui-tu* *ny*
 COND~PST.IPFV-exist if
³³⁸³⁶ ‘If there was someone who could redeem (the life of two brothers) with
³³⁸³⁷ money, ...’ (140507 jinniao-zh, 345)

³³⁸³⁸ 24.4.3 Action nominals

³³⁸³⁹ Some light verbs, in particular *βzu* ‘make’ (§22.4.2) are combined with action
³³⁸⁴⁰ nominals (§16.4) in highly grammaticalized constructions.

33841 24.4.3.1 Action nominals

33842 The *tu-* action nominals (§16.4.1) can be combined with the verb *βzu* ‘make’ to
 33843 express habitual actions, especially actions taking a considerable amount of time.
 33844 For instance *tu-taꝝ cʰu-βze* ‘she was weaving’ in (85) and *tu-ckʰo pjú-wy-nu-βzu*
 33845 ‘(when) we dry (grains in the field)’ refer to actions taking place every day (and
 33846 taking up most of the day) during a certain time period.

33847 The main verb *βzu* takes over the orientation selected by the verb in action
 33848 nominal form (§24.3.5): DOWNSTREAM in (85) (§15.1.4.5) and DOWNTOWARDS in (86).

- 33849 (85) *tx-tcui nui lu-ry-ji, tce tcʰeme nui kui li*
 INDEF.POSS-boy DEM IPFV-APASS-plant LNK girl DEM ERG again
 33850 *tui-taꝝ cʰui-βze tce, muuntoꝝ ra*
 NMLZ:ACTION-weave IPFV:DOWNTSTREAM-make[III] LNK flower PL
 33851 *tu-tsuwβ qʰe ku-nu-ryzi-ndzi pjy-ŋu.*
 IPFV-SEW LNK IPFV-AUTO-stay-DU IPFV.IFR-be
 33852 ‘The boy was working in the fields, the girl was weaving and doing
 33853 embroidery, they were living like that.’ (150828 donglang, 137)
- 33854 (86) *tcendyre tui-ckʰo pjú-wy-nu-βzu qʰe,*
 LNK NMLZ:ACTION-dry.in.the.sun IPFV:DOWNT-INV-AUTO-make LNK
 33855 *nui kx-yndzur ui-spa nui pjú-wy-ckʰo*
 DEM OBJ:PCP-grind 3SG.POSS-material DEM IPFV:DOWNT-INV-dry.in.the.sun
 33856 *tce nui-rom kóβmuaz cʰu-wy-ndzur ra tce, ununura*
 LNK AOR-be.dry only.after IPFV-INV-grind be.needed:FACT LNK DEM:PL
 33857 *yui-tu-murki tu-ndze ŋu.*
 CISL-IPFV-steal[III] IPFV-eat[III] be:FACT
 33858 ‘When we do drying in the sun, when we dry the grains that are to be
 33859 ground (one grinds them only after they have dried), it comes, steals
 33860 them and eats them.’ (22-CAGpGa, 66-68)

33861 This construction is found with both transitive (86) and intransitive verbs (87).
 33862 In the former case, the object is not overt. Although *βzu* remains transitive, this
 33863 construction shares with the antipassive derivations (§18.6) the function of de-
 33864 moting the object (§18.6.8.3).

- 33865 (87) *rxyo ra cʰui-βzu-nui, tui-ryaꝝ ra pjui-βzu-nui*
 song PL IPFV-make-PL NMLZ:ACTION-dance PL IPFV-make-PL
 33866 *pjy-ŋgryl nui-ŋu*
 INDEF.IPFV-be.usually.the.case SENS-be
 33867 ‘(Every year, when the festival took place, people), would sing and dance.’

33868

(150906 toutao-zh, 17)

33869 Action nominals either refer to the action itself or an object affected by the
 33870 action (§16.4.1). While the collocation with *βzu* ‘make’ probably derives from the
 33871 first meaning of the action nominals, in some examples it cannot be excluded
 33872 that the second meaning also intervenes. For instance, in (86), *tučkʰo+βzu* can
 33873 be understood as ‘to do the action of drying in the sun’, but also as ‘to do the
 33874 action related to grains that are dried in the sun’, since the grains in question are
 33875 directly referred to in the next clause as *kṛ-yndzur u-spa* ‘(grains) to be ground’.

33876 Action nominals can also occur with *lṛt* ‘release’, though this construction is
 33877 considerably less productive. This collocation can be used to indicate a sudden
 33878 semelfactive action as in (88), and the object can be overt.

- 33879 (88) *tce ažo a-mtʰum ta-nur-tsum qʰe, a-jas*
 LNK 1SG 1SG.POSS-meat AOR:UP:3→3'-VERT-take.away LNK 1SG.POSS-hand
 33880 *ra tuu-muurbuz cʰy-lṛt qʰe, ty-se*
 PL NMLZ:ACTION-scratch IFR:DOWNSTREAM-release LNK INDEF.POSS-blood
 33881 *pa-tcxt.*
 AOR:3→3'-take.out
 33882 ‘The kite took away the meat (that was in my hand), it made a scratch on
 33883 my hand, and caused a bleeding.’ (150909 qandZGi, 11-12)

33884 Apart from *βzu* and *lṛt*, the transitive verb *kʰṛt* ‘do repeatedly’, ‘do for a long
 33885 time’ also selects action nominals, but with ergative case marking (§8.2.2.10). The
 33886 modal verb *ra* ‘be needed’ (§24.5.3.1) can take degree nominals as subjects (§16.3.5)
 33887 instead of finite or infinitival complements.

33888 24.4.3.2 Simultaneous action nominals

33889 The simultaneous action nominals, prefixed in *tu-tu-* (§16.4.3), are also used in
 33890 collocation with *βzu* ‘make’. As in the previous construction, there is raising of
 33891 the orientation preverb onto the main verb *βzu* (§24.3.5). For instance, in (89) the
 33892 downwards orientation preverb *pjṛ-* on *βzu* from the nominalized verb *numdar*
 33893 ‘jump’.

33894 With an intransitive verb, the simultaneous constructions occur with a dual or
 33895 plural subject, and means that several individuals referred do an action together
 33896 at the same moment, as *tuu-tuu-numdar* ‘jumping together’ in (89). The auxiliary
 33897 *βzu* can even take the indefinite orientation prefixes *jṛ- ja-* as in (214) when oc-
 33898 curring with a motion verb.

24 Complement clauses

- 33899 (89) *mts^hu w-ŋgur* *tua-tua-numdar* *pjy-βzu-ndzi*
 lake 3SG.POSS-inside SIMULT-NMLZ:ACTION-jump IFR:DOWN-make-DU
 33900 ‘They (the two of them) had jumped together at the same time into the
 33901 lake.’ (nyima wodzer 2003, 104)

33902 When used with transitive verbs, this construction is only found with dual
 33903 or plural object, and implies that several entities were subjected to the action
 33904 together at the same time, as *tua-tua-tṣaqβ* ‘causing to roll down together’ in (90),
 33905 or that several object end up being tied together as result of the action as with
 33906 *tua-tua-tsufβ* ‘sewing together’ in (91).

- 33907 (90) *pri c^ho jlykrui nura tua-tua-tṣafβ* *zo*
 bear COMIT DEM:PL basket SIMULT-NMLZ:ACTION-cause.to.roll.down EMPH
 33908 *pjy-βzu*
 IFR:DOWN-make
 33909 ‘He made the basket with the bear (in it) roll down together.’
 33910 (2011-13-qala, 53)

33911 The comitative (§8.2.5) can be used as in (90) and example (213) in (§16.4.3) to
 33912 link two nouns referring to the patients that undergo the action together.

- 33913 (91) *tua-ŋga* *tua-tua-tṣufβ* *kx-βzu-t-a*
 INDEF.POSS-clothes SIMULT-NMLZ:ACTION-sew AOR-make:PST:TR-1SG
 33914 ‘I sewed the clothes together.’ (elicited)

33915 In the case of transitive verbs, the verb *βzu* ‘make’ takes the indexation of both
 33916 subject and object, as in (92) where it takes the portmanteau *ta-* prefix, showing
 33917 that the simultaneous action nominal does *not* have object function.

- 33918 (92) *nuzora tua-tua-qur* *tx-ta-βzu-nui*
 2PL SIMULT-NMLZ:ACTION-help AOR-1→2-make-PL
 33919 ‘I helped you all at the same time.’ (elicited)

33920 24.4.3.3 Compound action nominals

33921 The verb *βzu* ‘make’ is also combined with noun-verb compound action nomi-
 33922 nals (§16.4.7) as semi-object. Two such compound nominals have been identified.
 33923 With *k^hramba* ‘lie’ as first element, this construction means ‘pretend to do X’
 33924 (where X stands for the second element of the compound) as in (93) and (94).

- 33925 (93) [k^hramba-qur] ma-tx-kur-βzu-a
lie-help NEG-IMP-2→1-make-1SG
33926 ‘Do not pretend to help me!’ (elicited)
- 33927 (94) [k^hramba-nyre] px-βzu
lie-laugh IFR-make
33928 ‘He pretended to laugh.’ (elicited)

33929 With the lexicalized participle *kuzya* ‘a long time’ as first element of the com-
33930 pound, it means ‘do X for a long time’ as in (95) (§16.4.7).

- 33931 (95) qajyi pjúu-wy-rypyi tce tce, li [kuzyx-rylaj] zo
bread INF-INV-mix.flour.and.water LNK LNK again long.time-knead EMPH
33932 pjúu-wy-βzu.
IPFV-INV-make
33933 ‘When one mixes flour and water to make bread, one has to knead (the
33934 dough) for a long time.’ (160706 thotsi, 36)

33935 When the verbal component of the compound action nominal is transitive,
33936 both its subject and objects are indexed on the verb βzu ‘make’, as shown by the
33937 2→1 configuration in (93). In addition, the orientation preverb on βzu reflects
33938 the lexicalized orientation of the verb in the compound (§24.3.5), for instance
33939 UPWARDS in (93), WESTWARDS in (94) and DOWNWARDS in (95).

33940 The verb *lyt* ‘release’ (§22.4.2.2) is also productively used with action nominal
33941 compounds (§16.4.7) comprising a verb root such as *rpu* ‘bump into’ or *t^hu* ‘gore’
33942 as second element.

33943 24.4.4 Coordination

33944 Some verbs take post-verbal coordinated clauses instead of complement clauses.
33945 A clausal linker is inserted before that clause, showing its non-subordinated sta-
33946 tus. There are several constructions of this type.

33947 First, some attitudinal verbs such as *ɛnu* ‘suspect’, *nusumqñiz* ‘hesitate’, *nuslum-*
33948 *buy* ‘guess, estimate’ or *nusjuβts^hyt* ‘guess, estimate’ occur in a coordinating con-
33949 struction strikingly similar to that described in Tshobdun by Sun (2012: 487–488):
33950 the attitudinal verb is followed by the affirmative copula *çti* ‘be’ and a linker such
33951 as *ri* or *ma*, as in (96) and (97).

24 Complement clauses

- 33952 (96) *nui tu-nuablumbury-a cti ri, uzo kui ky-nyma nur*
 DEM IPFV-guess-1SG be.AFF:FACT LNK 3SG ERG OBJ:PCP-work DEM

33953 *sype*
 do.well:FACT
 'I guess that he will perform this task well.'

- 33955 (97) *tu-*knui*-a cti ma uzo kui ta-tuit η u*
 IPFV-suspect-1SG be.AFF:FACT LNK 3SG ERG AOR:3→3'-say be:FACT

33956 *ma_b my-xsi*
 not.be:FACT NEG-GENR:know
 'I am wondering whether what he said is true or not (suspecting that it is
 not true).' (elicited)

33959 Second, the verbs of perception *rto_b* 'look', *ru* 'look at' and *syo* 'listen' occur
 33960 (exclusively in the Imperfective, §21.2.7) in narratives in a coordinating construc-
 33961 tion with the linkers *tce* or *q^he* as in (98) and (99).

- 33962 (98) *ku-rto_b tce [tce^heme nui wuma zo pjy-mpcyr]*
 IPFV-look LNK girl DEM really EMPH IFR.IPFV-be.beautiful
 33963 'He saw that that the girl was very beautiful.' (150909 xiaocui-zh, 45)

- 33964 (99) *tce lu-ru tce [u-ŋguu nutcu uzo*
 LNK IPFV:UPSTREAM-look.at LNK 3SG.POSS-inside DEM:LOC himself
 33965 *lu-ntc^hyr η u-ŋu]*
 IPFV:UPSTREAM-be.reflected SENS-be
 33966 '(The rooster) looked at (a window) and (saw) its own reflection in it.'
 33967 (150819 kumpGa, 63)

33968 The verb of speech *fçrt* 'tell' is often used in the Imperfective with a zero object
 33969 cataphorically referring to reported speech clause(s) following it. The reported
 33970 speech clause(s) can serve as complement of another verb of speech as in (100)
 33971 or be free-standing.

- 33972 (100) *kucunguueuxpa
 in.former.times IPFV-tell-PL LNK DEM:LOC bandit IFR.IPFV-exist
 33973 *tu-ti-nui tce,*
 IPFV-say-PL LNK
 33974 'In former times, people used to tell that there were bandits there.'
 33975 (17-lhazgron, 21-22)*

These constructions are particularly common in texts translated from Chinese, where they might reflect calque from original language since in Chinese the perception verb precedes the complement, but it is also found in non-translated texts as in (101) (see also *ku-rtox* ‘he saw that...’ in 10, §21.2.2) and there is no doubt that it is a native construction.

- (101) *nui-syŋo tce, smyt kuaʃva ntura, wuma zo nui-me,*
 IPFV-listen LNK TOPO noble DEM:PL really EMPH 3PL.POSS-daughter
nui-me χsum pjy-tu tce
 3PL.POSS-daughter three IFR.IPFV-exist LNK
 ‘He had heard that the nobles of Smad had three daughters.’ (2002
 qaCpa, 7)

Third, some verbs optionally use a coordinating construction instead of complementation, without constructionalized semantic difference, in particular similitative verbs (§24.5.7).

24.5 Complement-taking verbs

An exhaustive survey of complement-taking verbs in Japhug would require a much larger corpus than the one available and a complete monograph of at least the size of the present grammar. For this reason, only a selection of the most frequent complement-taking verbs in the corpus is treated in this section. For each verb, the available complement types and complementation strategies are listed and exemplified.

Negative existential verbs can also take (subject) complements, but are discussed in §22.5.4.

24.5.1 Causative verbs

Some verbs derived with the causative prefixes (§17.2, §17.3) take complements or occur in complementation strategies. Three types of constructions are attested, expressing periphrastic causative, simultaneous events and manner.

24.5.1.1 Periphrastic causative constructions

In addition to the sigmatic and velar causative derivations (§17.2, §17.3), a variety of periphrastic causative constructions are also attested. Four groups of verbs are used as causative auxiliaries, including both causative verbs and non-derived verbs.

24 Complement clauses

34006 First, *βzu* ‘make’ can be combined with subject participles of adjectival stative
 34007 verbs to express change of state or increase of degree, as in (102) and (74).

- 34008 (102) *c^hui-nduul-nuu tce [kuu-ndu~nduβ] zo c^hui-βzu-nuu*
 IPFV-grind-PL LNK SBJ:PCP-EMPH~be.fine EMPH IPFV-make-PL
 34009 ‘They grind (tobacco) and make it very fine-grained.’ (30-CnAto, 38)

34010 Example (103) illustrates the fact that the velar causative *yywxti* ‘make bigger’
 34011 is semantically similar to the use of *βzu* with the participle *kuu-wxti*.

- 34012 (103) *w-p^huu jnuu-wxti tce, nura t^hamtcxt ma-tr-tu-yy-wxti,*
 3SG.POSS-price SENS-be.big LNK DEM:PL all NEG-IMP-2-CAUS-be.big
 34013 *azō nuu tu-nur-χti-a [nura st^hwuci kuu-wxti]*
 1SG DEM IPFV-AUTO-buy[III]-1SG DEM:PL as.much SBJ:PCP-be.big
 34014 *w-p^huu ma-tr-tu-βze, [kuu-tṣaŋ] ci tr-βze*
 3SG.POSS-price NEG-IMP-2-make[III] SBJ:PCP-be.fair a.little IMP-make[III]
 34015 ‘It is too expensive, don’t make it that expensive, I will buy it, don’t
 34016 make its price that expensive, give it for a fair price.’ (Bargaining 12, 12)

34017 This construction is not restricted to stative verbs. It is attested with transitive
 34018 verbs as in (104) to express indirect causation.

- 34019 (104) *cuuβjiz kuu-fse c^hy-ta tce, w-kuar*
 flat.stone SBJ:PCP-be.like IFR:DOWNTREAM-put LNK 3SG.POSS-mouth
 34020 *w-ηgwi tce, [tui-ci pjui-kui-lst] to-βzu*
 3SG.POSS-in LOC INDEF.POSS-water IPFV-SBJ:PCP-release IFR-make
 34021 ‘He placed (the leaf of a rhododendron) like a flat stone (next to his
 34022 younger brother’s mouth) in such a way that water could flow in his
 34023 mouth.’ (2011-05-nyima, 63-64)

34024 With dynamic verbs however, the preferred construction is to use an imper-
 34025 sonal modal verb such as *k^hu* ‘be possible’ or *ra* ‘be needed’ (§24.5.3.1) in particip-
 34026 ial form taking a complement verb, as in (105).

- 34027 (105) *la-ryci-nuu tce, [[lu-nuu-łox]*
 AOR:3→3'-pull-PL LNK IPFV:UPSTREAM-AUTO-come.out
 34028 *mr-kuu-k^hu] tu-βzu-nuu*
 NEG-SBJ:PCP-be.possible IPFV-make-PL
 34029 ‘They pull (on the thread to close the opening) and prevent it from
 34030 coming out.’ (30-CnAto, 42)

34031 Second, the sigmatic causative forms *sui-βzu*, *sui-pa*, *sui-γβzu* and *sui-γpa* derived
 34032 from the verbs *βzu* ‘make’, *pa* ‘do’, *qβzu* ‘become’ and *apa* ‘become’ (on the latter
 34033 two verbs see §18.1.2) are also commonly used as causative auxiliaries.

34034 Like the base verb *βzu*, these causative verbs are also most often used with a
 34035 modal impersonal auxiliary in subject participle form as in (106), (107) and (110).

- 34036 (106) [cui-ky-βde my-kui-ra] nui ndzizo kur
 TRAL-INF-throw NEG-SBJ:PCP-be.needed DEM 2DU ERG
 34037 nui-tui-sui-γβzu-ndzi ηu
 AOR-2-CAUS-become-DU be:FACT
 34038 ‘Thanks to both of you, there is no need to throw (people in the lake)
 34039 anymore.’ (2011-05-nyima, 191)

- 34040 (107) a-tui-ci nui-tui-s-qarndum tce [[azo
 1SG.POSS-INDEF.POSS-water IPFV-2-CAUS-be.muddy LNK 1SG
 34041 tui-ci kui-ymgri ky-ts^{hi}] my-kui-k^hu]
 INDEF.POSS-water SBJ:PCP-be.clear INF-drink NEG-SBJ:PCP-be.possible
 34042 nui-tui-sui-γpe nui-ηu
 IPFV-2-CAUS-become[III] SENS-be
 34043 ‘You have spoiled my water, you caused me to be unable drink clear
 34044 water.’ (lang he yang, 26)

34045 Other complement-taking stative verbs such as *sna* ‘be good’, ‘be fit’ also occur
 34046 in this causative construction, as in (§108).

- 34047 (108) tce tγ-mt^hum t^hamt^hctx [ky-ndza my-kui-sna]
 LNK INDEF.POSS-meat all INF-eat NEG-SBJ:PCP-be.good
 34048 nui-sui-γβze nui-c^ha.
 IPFV-CAUS-become[III] SENS-can
 34049 ‘(Maggots) can make all the meat improper for consumption (unfit to
 34050 eat).’ (25-akWzgumba, 109)

34051 The causee can be indexed as object on the causative verb, as in (109) or (110)
 34052 (which have 2SG and 1SG causees, respectively), but this indexation is only optional,
 34053 as shown by examples such as (107) which rather select a 3SG object despite the 1SG causee.

- 34055 (109) prab ur-pa nui^htcu (...) ku-ta-z-ryzi tce,
 cliff 3SG.POSS-down DEM:LOC IPFV-1→2-CAUS-stay LNK
 34056 [tui-ci nunu spikuku zo tcetu (...) ny-ta^h
 INDEF.POSS-water DEM every.day EMPH up.there 3SG.POSS-on

24 Complement clauses

- 34057 *nuitcu pjui-kui-lxt]* *zo tu-ta-sui-βzu*
DEM:LOC IPFV:DOWN-SBJ:PCP-release EMPH IPFV-1→2-CAUS-become
- 34058 *ŋu tce*
be:FACT LNK
- 34059 ‘(I will not kill you), but will have you stay under the cliffs, in such a
34060 way that the water flows down onto you.’ (150901 changfamei-zh, 162)
- 34061 (110) *[mui-tu-ky-nxtuti kui-ra] tý-wy-sui-βzu-a-nui*
NEG-IPFV-INF-DISTR:say SBJ:PCP-be.needed AOR-INV-CAUS-make-1SG-PL
- 34062 *ndza cti ma*
reason be.AFF:FACT LNK
- 34063 ‘It is because they made me (swear) not to tell anyone about it.’ (tWxtsa
34064 2003, 157)

34065 Another verb that can be used with the modal verbs *ra* and *k^hu* in a periphrastic
34066 causative construction is *tçrt* ‘take out’. It is rarer and only compatible with ne-
34067 gative participial forms to express the meaning ‘prevent from X’.

- 34068 (111) *[ký-xlualxt my-kui-ra] jy-tui-tcrt*
INF-fight NEG-SBJ:PCP-be.needed IFR-2-take.out
- 34069 ‘You prevented them from fighting.’ (elicited)

34070 Fourth, the velar causatives *yrra* ‘cause to have to’ and *yṛk^hu* ‘make it possible
34071 to’ of the modal auxiliaries involved in the constructions above can take infinitive
34072 or finite complement clauses (§17.3.2.3) to express indirect causation as in (112).

- 34073 (112) *[ký-sci] mui-nui-tui-yṛ-k^hu-t*
INF-be.born NEG-IPFV-2-CAUS-be.possible-PST:TR
- 34074 ‘You made it impossible for me to be born.’ (Gesar, 61)

24.5.1.2 Periphrastic tropative

- 34075 The causative verb *supa* ‘cause to do’ (from *pa* ‘do’, on which see §24.5.2, §22.4.2.5),
34076 among other functions (for instance §24.5.1.3), has the meaning ‘consider X to
34077 be Y’.
- 34078 The parameter *Y* can be a stative verb in participle form, such as *ku-βdi* in
34079 (113).

- 34081 (113) *ty-çp^byt nur a-puu-yndzymstu tce, nur [kur-βdi]*
 INDEF.POSS-patch DEM IRR-IPFV-be.level LNK DEM SBJ:PCP-be.well
 34082 *tu-sui-pa-nuu ηu*
 IPFV-CAUS-do-PL be:FACT
 34083 ‘If the patch is level (if it is neatly sewn), people consider it to (have
 34084 been sewn) well.’ (12-kAtsxWB-29)

34085 The object *X* can receive ergative case (§8.2.2.7) to express a comparative
 34086 meaning ‘consider *X* to be more *Y*’ (§26.2.1), as in (114). Ergative marking in this
 34087 construction can be ambiguous, since the subject (experiencer) of *supa* also re-
 34088 ceives ergative case.

- 34089 (114) *nuu uu-spa ra puu-naxtcuy cti, tce*
 DEM 3SG.POSS-material PL SENS-be.the.same be.AFF:FACT LNK
 34090 *t^hoŋrab nuu kuu [kuu-mum] tu-sui-pa-nuu ηu*
 bucket.alcohol DEM ERG SBJ:PCP-be.tasty IPFV-CAUS-do-PL be:FACT
 34091 ‘Although its ingredients are the same (as those used to make other
 34092 types of alcohol), (some people) consider alcohol in bucket to be more
 34093 tasty.’ (30-thoNraR, 16-17)

34094 The combination of *su-pa* with participles is semantically similar to the tropa-
 34095 tive *ny-* derivation (§17.5). For instance, the second clause in (114) can be glossed
 34096 as (115) with the tropative verb *nynum* ‘consider to be tasty’ (in this example, the
 34097 ergative on *t^hoŋrab* ‘alcohol in bucket’ is also a comparee marker, and does not
 34098 mark transitive subject).

- 34099 (115) *t^hoŋrab nuu kuu puu-ny-mum-nuu*
 bucket.alcohol DEM ERG SENS-TROP-be.tasty-PL
 34100 ‘They consider alcohol in bucket to be more tasty.’ (elicited)

34101 Unlike the *ny-* tropative derivation,¹¹ the *su-pa* periphrastic tropative can be
 34102 used with nouns as parameters, instead of stative verbs. As shown in (116), the
 34103 direct object is the person/entity that the subject considers to have the property
 34104 described by the parameter, while the parameter *Y* (here the noun *ŋgumdzuy*
 34105 ‘leader’) is a semi-object, not indexed on the verb.

¹¹The *nuu-* denominal prefix can be sporadically used with a tropative meaning (§20.7.2), for instance *nuugra* ‘treat as an enemy’ from *zgra* ‘enemy’, but it synchronically different from the tropative *ny-*, though these two prefixes are historically related (§20.10.3).

- 34106 (116) *nyzo ñgumdzury tu-ta-sur-pa ñu*
 2SG leader IPFV-1→2-CAUS-do be:FACT
 34107 ‘I consider you to be (my) leader.’ (elicited)

34108 The participle clauses in the periphrastic tropative construction (such as in 113
 34109 and 114 above) can be analyzed as headless participial relative clauses (§24.4.2.3).
 34110 The literal meaning of this construction is thus ‘consider X to be something that
 34111 is Y’.

34112 24.5.1.3 Simultaneity

34113 In addition to its periphrastic causative and tropative functions discussed in the
 34114 previous section, the causative verb *supa* ‘cause to do’ also occurs in a construc-
 34115 tion expressing simultaneity between two actions.

34116 This construction requires two complements, either two bare infinitives as
 34117 in (117) or a combination of a bare infinitive with a dental infinitive as in (118),
 34118 connected by the comitative *c^ho*.

- 34119 (117) *tce u-ti c^ho u-nyma ra ci zo*
 LNK 3SG.POSS-BARE.INF:say COMIT 3SG.POSS-BARE.INF:work PL one EMPH
 34120 *to-sui-pa*
 IFR-CAUS-do
 34121 ‘As he said it, he put it into application at the same time.’ (150826 liyu
 34122 tiao longmen-zh, 40)

- 34123 (118) *nuacimuma u-ti c^hondyre u-tuu-ce ci*
 immediately 3SG.POSS-BARE.INF:say COMIT 3SG.POSS-INF:II-go one
 34124 *to-sui-pa tce*
 IFR-CAUS-do LNK
 34125 ‘As he said this, he immediately went (there).’ (150830 baihe jiemei-zh,
 34126 179)

34127 Unlike other syntactic contexts (§24.2.2) where dental infinitives does not take
 34128 possessive prefixes, in this construction they obligatorily take a possessive prefix
 34129 coreferent with the intransitive subject, as shown by the forms *u-tuu-ce* vs. *a-tuu-ce*
 34130 in (118) and (119), respectively.

- 34131 (119) *u-ti* *c^ho* *a-tuu-ce* *ci*
 3SG.POSS-BARE.INF:say COMIT 1SG.POSS-INF:II-go one
 34132 *ty-suu-pa-t-a*
 AOR-CAUS-do-PST:TR-1SG LNK
 34133 ‘I said it and went there (at the same time).’ (elicited based on 118)

34134 24.5.1.4 Manner

34135 Both sigmatic (§17.2) and velar causative (§17.3) causative derivations from adjec-
 34136 tival verbs can be used as complement-taking verbs, expressing the manner in
 34137 which the action described in the complement clause takes place.

34138 This construction is found with dental/bare infinitival complements as in (120)
 34139 or velar infinitival complements (121). Additional examples are presented in §17.2.4.7
 34140 and §17.3.2.2.

- 34141 (120) *ki* *ty-ndym* *tce*, *konyla* *zo*, *[ui-puu*
 DEM.PROX IMP-take[III] LNK completely EMPH 3SG.POSS-keep(1)
 34142 *wi-pa]* *a-ty-tuu-yy-βdi* *ma*
 3SG.POSS-BARE.INF:keep(2) IRR-PFV-2-CAUS-be.well LNK
 34143 ‘Take this and keep it well (make sure not to lose it).’ (140428 mu e
 34144 guniang-zh, 24)
- 34145 (121) *[ny-kuu-mŋym* *konyla* *ky-rtoŋ]* *a-puu-tuu-suu-βzyβ*
 2SG.POSS-SBJ:PCP-hurt completely INF-look IRR-PFV-2-CAUS-be.careful
 34146 ‘Let (a doctor) carefully examine your condition.’ (elicited)

34147 24.5.2 *pa* ‘do’

34148 The transitive verb *pa*, which occurs as a light verb (§22.4.2.5) and presents erga-
 34149 tive lability (§14.5.1.4), selects imperfective infinitive complements when used in
 34150 the meaning ‘discuss and agree/decide to do X’ (122). All examples of this con-
 34151 struction in the corpus occur with B-type orientation preverbs on the infinitive
 34152 (§16.2.1.2).

- 34153 (122) *[nuatcu tce puu-ky-ytuaŋ tce ku-ky-y-nyjuaŋ]* *to-pa-ndzi ri*,
 DEM:LOC LNK IPFV-INF-meet LNK IPFV-INF-RECIP-wait IFR-do-DU LNK
 34154 ‘The two of them agreed to meet there and wait for each other.’ (150820
 34155 qaprANar, 47)

34156 The verb *pa* can take more than one infinitive complement. There is generally
 34157 subject coreference between the clauses. However, in example (123) the singular
 34158 subject of the infinitive clauses corresponds to only part of the dual subject of
 34159 *pa*.¹²

- 34160 (123) [užo ku-ky-ryzzi tce tu-ky-qur] to-pa-ndzi.
 34161 3SG IPFV-INF-stay LNK IPFV-INF-help IFR-do-DU
 34162 ‘They_{i+j} discussed and decided that he_i would stay and help him_j.’
 (140512 fushang he yaomo-zh, 48)

34163 The verb of speech *kṛtupa* ‘tell’, which selects reported speech complements,
 34164 is derived from *pa* (§14.3.4, §20.13.1).

34165 24.5.3 Modal verbs

34166 Modality in Japhug is encoded by TAME categories (§21.4), derivations such as
 34167 the abilitative (§19.3), various sentence final particles (§10.4.4), and most im-
 34168 portantly by complement-taking modal auxiliaries and noun-verb collocations
 34169 (§24.6.3.3). This section provides a description of the use of some of the most
 34170 common auxiliaries.

34171 In addition to the verbs discussed in this section, some verbs of cognition such
 34172 as *suso* ‘think’ also have modal functions (§24.5.4.1).

34173 24.5.3.1 Impersonal modal verbs

34174 An important number of modal auxiliary verbs in Japhug are intransitive, and
 34175 take a complement clause as their subject, and are therefore in 3SG invariable
 34176 form (§14.2.7), regardless of the subject or object in the complement clause. The
 34177 verbs *ra* ‘be needed’, ‘need’, *tɔz* ‘have to’, ‘have better’,¹³ and *kʰw* ‘be possible’
 34178 are used with either finite complements (§24.2.3) or velar infinitives (§24.2.1), as
 34179 shown by (124) and (125) on the one hand, and (126) on the other hand. In addition,
 34180 *ra* is also attested with degree nominals (§16.3.5).

¹²This interesting sentence differs from the original Chinese text, which has 酋长...决定留下来帮助他 < qíúzhǎng juédìng liúxiànlái bāngzhù tā > ‘The chieftain ... and decided to stay and help him’. The dual *to-pa-ndzi* is a speech error, but Tshendzin considered the resulting sentence to be grammatical and meaningful, though semantically different from the original text.

¹³This modal verb is probably grammaticalized from the motion verb *tɔz* ‘come out’ (§15.1.2.1).

- 34181 (124) *t^ha [azo-suoso nua-nua-pe-a] k^huu*
 later 1SG-as.wish IPFV-AUTO-do[III]-1SG be.possible:FACT
 34182 ‘(Once he dies), it will become possible for me to do whatever I want.’
 34183 (28-smAnmi, 61)
- 34184 (125) *[kutcu ku-ryzi-a] nua-lob*
 DEM.PROX:LOC IPFV-stay-1SG SENS-be.needed
 34185 ‘I will (have better/have no choice but) stay here.’ (28-qAjdoskAt, 78)

34186 When impersonal verbs are combined with velar infinitive complement, the
 34187 subject is not indexed anywhere in the clause; this construction occurs with
 34188 generic person, as in (126) and (127), but not exclusively, as shown by (128) with
 34189 an implicit 1SG transitive subject in the complement clause, which has the same
 34190 meaning as that in (124) above.

- 34191 (126) *[zara nua-skyt my-ky-βzu] müj-k^huu.*
 3PL 3PL.POSS-speech NEG-INF-make NEG:SENS-be.possible
 34192 ‘There was not choice but to speak their language (with them, as they
 34193 did not understand Japhug or Chinese) (150901 tshuBdWnskAt, 22)
- 34194 (127) *nua nua-mbuut q^he, tce [tuu-mpitsi ky-γ<nua>χa]*
 DEM AOR-ACaus:take.off LNK LNK GENR.POSS-life INF-<AUTO>have.a.gap
 34195 *lob*
 be.needed:FACT
 34196 ‘If it (one’s tooth) falls off, one has no choice but have a gap (in one’s
 34197 teeth) all of one’s life.’ (27-tWCGArgu, 61)
- 34198 (128) *[azo-suoso ky-nua-pa] tu-k^huu cti*
 1SG-as.wish INF-AUTO-do IPFV-be.possible be.AFF:FACT
 34199 ‘Then it will become possible for me to do whatever I want.’ (150907
 34200 niexiaoqian-zh, 115)

34201 The auxiliaries *nts^{hi}* ‘have better’, *zgvt* ‘have to’ and *jvγ* ‘be allowed’ are almost
 34202 only attested with finite complement clauses, as in (129) and (130).

- 34203 (129) *a-bi kutcu ky-ryzi tce, [azo*
 1SG.POSS-younger.sibling DEM.PROX:LOC IMP-stay LNK 1SG
 34204 *tuu-ci z-nua-car-a] nua-nts^{hi}*
 INDEF.POSS-water TRAL-IPFV-look.for-1SG SENS-have.better
 34205 ‘Brother, stay here, let me look for water.’ (2011-05-nyima, 60)

- 34206 (130) [azo pjur-si-a] *pjur-zgyt* *ma*
 1SG IPFV-die-1SG SENS-be.needed LNK
 34207 ‘I have to/deserve to die.’ (nongfu yu she-zh, 19)

34208 Despite being homophonous to the phasal verb *jyy* ‘be finished’ (§24.5.6), the
 34209 modal verb *jyy* ‘be allowed’ differs from it both in meaning and in complement
 34210 type: the modal *jyy* takes finite complements (131), while the phasal *jyy* selects
 34211 dental/bare infinitives (see example 14, §24.2.2.2).

- 34212 (131) *q^he* [pnu-k^ham-a] *jyy* *ri*, [n^y-rca
 LNK IPFV-give[III]-1SG be.allowed:FACT LNK 2SG.POSS-together.with
 34213 *tu-kui-tsum-a]* *ra*
 IPFV:UP-2→-take.away-1SG be.needed:FACT
 34214 ‘I can give it to you (I agree to give it to you), but then you have to take
 34215 me (to heaven) with you.’ 31-deluge, 101)

34216 Both verbs however are compatible with velar infinite complements, as shown
 34217 by (132) and (133), respectively. However, examples of infinitive complements
 34218 with the modal *jyy* as in (133) are extremely rare.

- 34219 (132) [*tx-lu* *ky-tcxt*] *pnu-jyy*
 INDEF.POSS-milk INF-take.out AOR-be.finished
 34220 ‘After she had finished milking, (he said).’ (2014-kWLAG, 230)
- 34221 (133) *tceri t^ham tce* [*nura ky-stu*] *múj-jyy* *ma*,
 LNK now LNK DEM:PL INF-do.like NEG:SENS-be.allowed LNK
 34222 ‘Now it is not allowed to do these things (kill whales).’ (160703 jingyu, 61)

34223 Impersonal modal verbs, in addition to finite complements in the Imperfec-
 34224 tive, are also found with Imperative (§21.4.2.4, §21.4.3.2) and Irrealis (§21.4.1.4)
 34225 complements.

34226 Verbs without alternation between stem I and stem III (§12.2.2; in particular
 34227 intransitive verbs) that select the EASTWARDS orientation take the *ky-* orientation
 34228 preverb in the Imperative (§21.4.2.1), a form which can be superficially similar to
 34229 a velar infinitive. For instance, the form *ky-nuu-ryzi* in (134) could in principle
 34230 either be parsed as infinitive or Imperative; that the latter interpretation is the
 34231 only one possible is shown by the fact that the Imperative dual *ky-nuu-ryzi-ndzi*
 34232 or plural *ky-nuu-ryzi-nu* forms can occur in the same context, while the Infinitive
 34233 does not inflect for person and number.

- 34234 (134) [nyzo kutcu ky-nur-ryzi] jy
 2SG DEM.PROX:LOC IMP-AUTO-stay be.allowed:FACT

34235 ‘You can stay here (we agree that you stay here).’ (140504
 34236 baixuegongzhu-zh, 96)

34237 The impersonal auxiliary *ŋgru* ‘succeed’, on the other hand, is only found with
 34238 velar infinitive complements, as in (135).

- 34239 (135) *w-kʰa* *ky-nuu-βzu* *mu-pjy-ŋgru*
 3SG.POSS-house INF-AUTO-make NEG-IFR-succeed

34240 ‘(As he spend all time singing rather than working, in the end) he did
 34241 not succeed in building his house.’ (26-NalitCaRmbWm, 52)

34242 The verbs *kʰu* ‘be possible’ and *jy* ‘be allowed’ both encode epistemic modal-
 34243 ity, but the former is used in the case of possibility due to external circumstances,
 34244 while the latter expresses permission by the speaker (30, 134), the addressee (in
 34245 interrogative forms such as *ú-jy*, see 288, §21.7.4.1), or another referent (136).

- 34246 (136) *tce* [*tui-xpa tui-yjyn ma* *nuu-ystay-nuu*] *máj-jy*
 LNK one-year one-time apart.from IPFV-meet-PL NEG:SENS-be.allowed
 34247 ‘They can only meet each other (they are not allowed by the gods of
 34248 heaven to meet more than) once a year.’ (150828 niulang-zh, 184)

34249 Among the verbs discussed in this section, only *ra* and *kʰu* are attested in forms
 34250 other than 3sg. The verb *kʰu*, in addition to its function as modal auxiliary, can
 34251 occur with any person when used in the meaning ‘agree, listen to, obey’ (without
 34252 complement clause) as in (137) with a 2PL subject.

- 34253 (137) *máj-tur-kʰu-nuu* *qʰe tce, tce atu a-mu ci*
 NEG:SENS-2-agree-PL LNK LNK LNK up.there 1SG.POSS-mother INDEF
 34254 *tu tce, nuu w-cki zuu yui-ty-nuu-tʰu-nuu ma*
 exist:FACT LNK DEM 3SG.POSS-DAT LOC CISL-IMP-AUTO-ask-PL LNK
 34255 ‘(I am telling you that I am not the person you are looking for), you
 34256 don’t want to (listen to me), my mother is up there, come and ask her
 34257 (about it) as suits you.’ (2003 sras, 65)

34258 As for *ra*, in the meaning ‘need’ it does not need to have a complement clause
 34259 as subject, and can select a noun or even a first or second person referent as in
 34260 (138) (see also 37, §14.2.7).

- 34261 (138) *azury my-tui-ra*
 1SG:GEN NEG-2-need:FACT
 34262 ‘I don’t need you’ (elicited)

34263 The experiencer (the person/entity in need) is marked as a genitive oblique
 34264 argument (§8.2.3.2), either as a genitive pronoun (138) or as a possessive prefix
 34265 (139).

- 34266 (139) *nyzo ny-kui-qur tui-ra tce*
 2SG 2SG.POSS-SBJ:PCP-help AOR-need LNK
 34267 ‘When you need someone to help you...’ (140506 shizi he huichang de
 34268 bailingniao-zh, 160)

34269 The causative verbs *yrra* ‘cause to have to’ and *yrk^hu* ‘make it possible to’
 34270 (derived by the velar causative prefix from *ra* ‘be needed’ and *k^hu* ‘be possible’,
 34271 respectively), are also complement-taking verbs, used in one of the periphrastic
 34272 causative constructions (§17.3.2.3, §24.5.1.1).

34273 24.5.3.2 *c^ha* ‘can’

34274 The verb *c^ha* ‘can’ is morphologically intransitive, and can either be used as a
 34275 plain intransitive (in the meaning ‘be fine’, see for instance 6, §21.1.4) or as a
 34276 semi-transitive verb (§14.2.3) selecting either a finite complement (§24.2.3) or an
 34277 infinitive one (§24.2.1), as shown by (140).

- 34278 (140) *[a-sroB kui-ri] ri my-tui-c^ha, [tu-kui-qur-a] ri*
 1SG.POSS-life INF-save also NEG-2-can:FACT IPFV-2→1-help-1SG also
 34279 *my-tui-c^ha*
 NEG-2-can:FACT
 34280 ‘You are neither able to save my life nor to help me.’ (shizi he laoshu-zh,
 34281 18)

34282 With finite complements, *c^ha* ‘can’ can either have subject coference as in (140,
 34283 141a, 142) or be used as an impersonal verb as in (141b), with slightly different
 34284 meanings.

- 34285 (141) a. *[c^hui-tui-myci] tui-c^ha*
 IPFV-2-be.rich 2-can:FACT
 34286 ‘You can become rich.’ (elicited)

34287 b. [c^hu-tuu-myci] c^ha

IPFV-2-be.rich can:FACT

34288 ‘It will be possible for you to become rich.’ (140515 facaimeng-zh, 13)

34289 Since the 1SG form *c^ha-a* (can:FACT-1SG) is phonetically identical to the 3SG *c^ha* (can:FACT), distinguishing between these two patterns is not possible when the subject is 1SG (or 3SG). Clear examples of the *c^ha* in impersonal use (where it can be tested) are rare.

34290 All examples in the corpus of *c^ha* ‘can’ with a verb in 2SG→1SG form in the
34291 complement clause have 2SG indexation as in (140) above and (142) below.

34292 (142) [azo puu-kui-cuuy-mu-a] my-tuu-c^ha
1SG IPFV-2→1-CAUS-be.afraid-1SG NEG-2-can:FACT

34293 ‘You cannot scare me.’ (140516 guowang halifa-zh, 54)

34297 24.5.3.3 *suxc^ha* ‘can’

34298 The verb *suxc^ha* is the sigmatic causative derivation (§17.2) of *c^ha* ‘can’ (§24.5.3.2).
34299 It is nearly always in negative form. It can occur with an overt nominal ob-
34300 ject in the meaning ‘cause to be (un)able to bear’ (example 37, §17.2.4.8). As a
34301 complement-taking verb, it requires a velar infinitive complement (§24.2.1), and
34302 exclusively occurs in inverse form with a non-overt causer, and has the specific
34303 meaning of ‘make (physically) unable to X’, with a non-overt implicit agent, the
34304 piglet or lamb in (143) and the bee in (144).

34305 (143) t^huu-wxti-nuu tsa tce tce, ta-tsum tce tu-yyr^by^fjy^g
AOR-be.big-PL a.little LNK LNK AOR:3→3'-take.away LNK IPFV-struggle
34306 puu-cti tce uizo [ky-tsum] muu-puu-wy-sux-c^ha.
SENS-be.AFF LNK 3SG INF-take.away NEG-SENS-INV-CAUS-can

34307 ‘When (piglets, lamb) have grown up, when (the eagle tries to) take
34308 away (one of them), it struggles and (the eagle) is not strong enough to
34309 take it away. (150819 RarphAB, 6)

34310 (144) yzo kui-fse kui-wxti nuura rcanuu, [zaza zo ky-sat]
bee SBJ:PCP-be.like SBJ:PCP-be.big DEM:PL UNEXP:FOC SOON EMPH INF-kill
34311 my-wy-sux-c^ha ma uizo puu-xtci, ci nuu puu-wxti
NEG-INV-CAUS-can:FACT LNK 3SG SENS-be.small INDEF DEM SENS-be.big
34312 tce
LNK

34313 ‘In the case of (relatively) big (insects) like bees,_i (the spider)_j cannot kill
34314 it_i quickly, because it_j is small while the other one_i is bigger.’

The transitive subject of the infinitival clauses *ky-tsum* and *zaza zo ky-sat* in (143) and (144) is here coreferent with the causee of *sux-c^ha*. Since *c^ha* is morphologically intransitive, this causee is syntactically equivalent to the direct object. It is one of the rare complement-taking verb with obligatory object-subject coreference (§24.2.1.2).

24.5.3.4 *spa* ‘be able’

The transitive *spa* ‘be able’, ‘know how to’ is historically a lexicalized abilitative of *pa* ‘do’ (§19.3.1). It indicates ability that was acquired through a learning process. This verb can either select a noun or a noun phrase as object (145, 146).

- (145) *azo kupa-sk^yt m^áuj-spe-a*
 1SG Chinese-language NEG:SENS-be.able[III]-1SG
 ‘I am not able to (speak) Chinese.’ (160721 XpWN, 90)

In Inferential or Aorist forms, it can be understood as ‘learn how to’ (‘acquire the ability to’).

- (146) *coŋβzu ko-spa*
 carpentry IFR-be.able
 ‘He learned carpentry.’ (elicited)

Alternatively, *spa* takes infinitival (§24.2.1) or finite complement clauses (§24.2.3) as in (147). Subject coreference between *spa* and the verb in the complement clause is required (§24.2.1.2, §24.2.3.2).

- (147) *[“a-mu” tu-ti] ur-n^áu-spe?*
 1SG.POSS-mother IPFV-say QU-SENS-be.able[III]
 ‘Can he (a baby) say “mummy”? ’ (conversation, 15-01-13)

24.5.3.5 *n^{yz}* ‘dare’, *p^hot* ‘dare’

The verbs *n^{yz}* ‘dare’ and *p^hot* ‘dare’ (the second is barely used in the Kamnyu dialect) can be used with both infinitival and finite complements. They require subject coreference.

In example (148) with the verb *n^{yk}h^u* ‘invite’ (to one’s home as a guest’ (one of the few transitive verbs implying a volitional action of both subject and object, §24.2.2.2), the interpretation ‘I do not dare to go to his house as a guest’ (with coreference of the object of the complement clause and the subject of the main clause) is not possible, and a different construction is needed to express this meaning (149, with an object participle as explained in §24.4.2.1).

- 34345 (148) [cw-ky-nyk^hu] my-naz-a
TRAL-INF-invite NEG-dare:FACT-1SG
34346 ‘I do not dare to go and invite him.’ (elicited)
- 34347 (149) [[ky-nyk^hu] ky-ce] my-naz-a
OBJ:PCP-invite INF-go NEG-dare:FACT-1SG
34348 ‘I do not dare to go (to his house) as a guest.’ (elicited)

34349 The verb *nyz* ‘dare’ is attested in a double negation constructions ‘not dare not
34350 to X’ (example 23, §13.3).

34351 24.5.4 Verbs of cognition

34352 24.5.4.1 *suso* ‘think’, ‘want’

34353 The verb *suso* describes either a cognitive process (‘think that X’) or volitional
34354 deontic modality (‘want to X’).

34355 As a modal verb, it either takes infinitive complement clauses (150, §24.2.1),
34356 or finite clauses (151, 152, §24.2.3), with subject coreference between the comple-
34357 ment and the main clause.

- 34358 (150) [c^hyci ky-ts^hi] ta-suso-nu^u tce, tce ki
alcohol INF-drink AOR:3→3'-want-PL LNK LNK DEM.PROX
34359 u^u-qa u^u-thum nu^u nu^u-χcob-nu^u tce
3SG.POSS-bottom 3sg.POSS-cork DEM IPFV-remove-PL LNK
34360 ‘When people want to drink the alcohol, they remove the cork at the
34361 bottom (of the jar).’ (160703 araR, 64-65)
- 34362 (151) [ku-yuit-a] nu^u-suso-t-a ri py-nu^u-jmut-a ma
IPFV:EAST-bring-1SG AOR-want-PST:TR-1SG LNK IFR-AUTO-forget-1SG LNK

34363

- 34364 ‘I wanted to bring it but I forgot it.’ (23-tshAYCAnW, 2)
- 34365 (152) [a-rxyo nu^u-tui-syyo] ty-tui-suso-t tce, a-yu^u-jr-kui-suye-a
1SG.POSS-song IPFV-2-listen AOR-2-want-PST:TR LNK IRR-CISL-invite-1SG
34366 q^he nu^u eti
LNK DEM be.AFF:FACT
34367 ‘When you want to listen to my songs, send people to coma and invite
34368 me and that’s it.’ (140519 ye^{ing}-zh, 249)

34369 The verb *suso* normally selects the orientation WESTWARDS as in (151) (or DOWN-
 34370 WARDS when used in the Past or Inferential Imperfective (§21.5.3), but examples
 34371 (150) and (152) also show that it sometimes occurs with the Aorist UPWARDS ori-
 34372 entation preverbs *tr-* or *ta-* in temporal clauses meaning “when X wants to Y”
 34373 (§21.5.1.4).

34374 24.5.4.2 *tso* ‘understand’, ‘know’, *suχsyl* ‘recognize’, ‘realize’

34375 The semi-transitive verb *tso* ‘understand’, ‘realize’, ‘know’ can take nominal semi-
 34376 objects (§14.2.3), and occur with three types of complement clauses or comple-
 34377 mentation strategy. First, it takes finite complete clauses (§24.2.3) as in (153).

- 34378 (153) *nunuu [tx-tcu nui yuu u-k^ha nutcu tc^heme*
 DEM INDEF.POSS-son DEM GEN 3SG.POSS-house DEM:LOC girl
kui-mpcyr ci yyzu] nui ko-tso-nui.
 SBJ:PCP-be.beautiful INDEF exist:SENS DEM IFR-understand-PL
 34380 ‘They realized that there was a beautiful girl in the boy’s house.’ (150828
 34381 donglang, 92)

34382 Second, subject participial clauses in *kui-* occur as semi-objects of this verb
 34383 (§24.4.1), as in (154).

- 34384 (154) *li [icq^ha txime nui mu-puu-kui-sij] nui*
 again the.aforementioned girl DEM NEG-AOR-SBJ:PCP-die DEM
 34385 *ko-tso*
 IFR-understand
 34386 ‘She realized that the girl had not died (the girl not having died).’ (140504
 34387 baixuegongzhu-zh, 182)

34388 Third, *tso* also selects a (finite or participial) correlative clauses with an inter-
 34389 rogative pronoun as in (155).

- 34390 (155) *[tx-rza^h t^hystuy nui-ari] mur-pjx-tso*
 INDEF.POSS-time how.much AOR-go[II] NEG-IFR-understand
 34391 ‘He had not realized how much time had passed.’ (28-smAnmi, 263)

34392 The transitive *suχsyl* ‘recognize’, ‘realize’ also takes finite complement clauses
 34393 (see 210, §15.2.8.1) or participial clauses as in (156).

- 34394 (156) *tce numuu kuu [qazo t_v-kuu-nuicpuaz] nuu pjy-su_vsyl.*
 LNK DEM ERG sheep AOR-SBJ:PCP-disguised DEM IFR-recognize
 34395 ‘He (the shepherd boy) had noticed that the (nobleman) was disguised as
 34396 a sheep.’ (40513 mutong de disheng-zh, 63)

34397 However, despite being superficially identical to (154) above, in (157) *su_vsyl*
 34398 selects as direct object the 1SG intransitive subject of the participial clause. A
 34399 possible way to explain this observation is to analyze the participial clause *a_{zo}*
 34400 *t_c^he_{me} kuu-_ju* as a relative clause whose head is *a_{zo}* (‘me who am a girl’).

- 34401 (157) <*liangshanbo*> *nuu kuu [a_{zo} t_c^he_{me} kuu-_ju]* *nuu*
 ANTHR DEM ERG 1SG girl SBJ:PCP-be DEM
 34402 *a-mx-púi-wy-su_vsal-a*
 IRR-NEG-PFV-INV-realize-1SG
 34403 ‘(I hope that) Liang Shanbo will not realize that I am a girl (will
 34404 recognize me being a girl).’ (150826 liangshanbo zhuyingtai-zh, 76)

34405 24.5.4.3 *βzjoz* ‘learn’ and *suxcvt* ‘teach’

34406 The verbs of learning *βzjoz* ‘learn’ and *suxcvt* ‘teach’ take infinitive complements,
 34407 as shown by (158) and (159).

- 34408 (158) [<*tuolaji*> *ky-lvt*] *ra ka-βzjoz*
 tractor INF-release PL AOR:3→3'-learn
 34409 ‘He learned to drive a tractor.’ (14-siblings, 231)

34410 In the case of the secundative verb *suxcvt* (§14.4.2), the direct object is the
 34411 person being taught, the 2SG in (159), while the infinitive clause is the theme.

- 34412 (159) [*tyfsyri ky-βzu*] *ci pjui-ta-suxcvt*
 thread INF-make a.little IPFV-1→2-teach
 34413 ‘Let me teach you how to make a thread.’ (vid-20140506043657, 43)

34414 24.5.5 Verbs of perception

34415 The transitive perception verbs *mto* ‘see’ and *mts^hym* ‘hear’, ‘smell’, ‘feel (non-
 34416 visually)’ express non-volitional perception. The contrast between *ru* ‘look at’
 34417 (§24.4.4) and *mto* can be illustrated by (160), where the latter has a meaning close
 34418 to ‘find’.

24 Complement clauses

These two verbs are compatible with finite complements (§24.2.3), as in (161), without any coreference restriction.

- 34424 (161) [sungi nuu nuu-yywu] nuu pjy-mts^hym
 lion DEM IPFV-cry DEM IFR-hear
 34425 ‘(The mouse) heard that the lion was crying.’ (shizi he laoshu-zh, 25)

They are incompatible with infinitival complements, but often take participial or finite relative clauses as objects (§23.8.2, §24.4.1).

Non-finite verb form in *kṛ-* such as *kṛ-ntsye* in (162) resemble velar infinitives, but since intransitive dynamic verbs do not occur with *kṛ-* in this context, these forms are analyzed as object participles (§16.2.1.1).

- 34431 (162) *tce [uu-rdo& nua ku-fse ky-ntsye] nua*
LNK 3SG.POSS-grain DEM SBJ:PCP-be.like OBJ:PCP-sell DEM
34432 *mui-pua-mto-t-a*
NEG-AOR-see-PST:TR-1SG
34433 'I have not seen its grains (of buckthorn) sold like that (it is always sold
34434 in processed form).' (09-mi, 61)

The verb *mts^hym* is often used in combination with the form *ky-ti* as in (163). This form could be analyzed as a complementizer, but since positive evidence of its grammaticalized status is not obvious, I analyze *ky-ti* here as an object participle taking an object complement clause (*nu nuu-sy-mtsuy*). That complement clause itself is in addition the relativized element of the head-internal object participial clause [*"nuu nuu-sy-mtsuy"* *ky-ti*] (§23.8.4), a construction that can be glossed as ‘I have not heard ‘It bites people’ being said’.

- 34442 (163) *[[nuu puu-sy-mtsuy] ky-ti] muu-púi-wy-mts^hym.*
DEM SENS-APASS-bite OBJ:PCP-say NEG-AOR-INV-hear
34443 ‘I have not heard that it bites people.’ (28-tshAwAre, 71)

With intransitive verbs, the subject participle in *ku-* is always found in the clauses occurring as object of *mto* and *mts^hym*, as in (164). Such clauses are to be analyzed as participial relatives (§24.4.1).

- 34447 (164) *pjuu-rū q^he [tceki tur-ci u-ŋgu wzo*
 IPFV:DOWN-look LNK down INDEF.POSS-water 3SG.POSS-in 3SG
 34448 *pui-kui-ntc^hyr] nuu pjy-mto.*
 AOR:DOWN-SBJ:PCP-appear DEM IFR-see
 34449 ‘He looked down, and saw his own reflection in the water below
 34450 (himself reflected in the water).’ (140519 chou xiaoya-zh, 180)

34451 In (165), *mts^hym* even takes as object a head-internal relative clause in *kui-*
 34452 (rather than *ky-* as in 163 above), with the transitive subject as relativized ele-
 34453 ment (§23.5.2).

- 34454 (165) *nuu-syŋo tce [icq^ha sŋakspa nuu kui “tvtſu*
 IPFV-listen LNK the.aforementioned sorcerer DEM ERG lamp
 34455 *yur-tv-syndu-nur” u-kui-ti] nuu pjy-mts^hym tce*
 CISL-IMP-exchange-PL 3SG.POSS-SBJ:PCP-say DEM IFR-hear LNK
 34456 ‘She heard the sorcerer saying ‘Come and exchange (your) lamp’.
 34457 (140511 alading-zh, 222)

34458 Verbs of perception and cognition also occur with finite clauses containing
 34459 interrogative pronouns which look like correlatives (§23.2.5), such as *ŋotcu jx-*
 34460 *nuu-łor* in (166).

- 34461 (166) *[ŋotcu jx-nuu-łor] tci muu-pui-mto-j, [ŋotcu jx-cq^hlyt]*
 where IFR-AUTO-come.out also NEG-AOR-see-1PL where IFR-disappear
 34462 *tci ky-cwiftas muu-pjy-c^ha-j*
 also INF-remember NEG-IFR-can-1PL
 34463 ‘We neither saw where she came from, nor can we remember towards
 34464 which direction she disappeared.’ (2003 sras, 38)

34465 The volitional perception verbs *syŋo* ‘listen’ (labile), *rtoł* ‘look’ (transitive) and
 34466 *ru* ‘look at’ (§15.1.2.4), though they can have nominal objects or semi-objects, do
 34467 not take complement clauses, but do occur in a coordinating complementation
 34468 strategy (§21.2.7, §24.4.4).

34469 24.5.6 Phasal verbs and other aspectual auxiliaries

34470 Aspectual and phasal complement-taking verbs present a much greater variety
 34471 of constructions than modal verbs. Table 24.2 summarizes the constructions at-
 34472 tested with each verb, not all of which are equally common.¹⁴

¹⁴The abbreviations are as follows: I. (velar infinitive, §24.2.1), BI (bare infinitive and *tu-* infinitive, §24.2.2), F. (finite complement, §24.2.3), tr. (transitive), impers. (intransitive impersonal).

Table 24.2: Inventory of phasal and aspectual auxiliaries in Japhug

Verb		I.	BI	F.	Compl. strategy
<i>rpo</i> ‘experience’	tr.	✓	✓		
<i>sṛza</i> ‘begin’	tr.	✓	✓		
<i>za</i> ‘begin’	tr.	✓	✓		§24.2.3.3
<i>st^hut</i> ‘finish’	tr.	✓	✓		§24.2.3.3
<i>sṛtçutṣi</i> ‘continue’	tr.	✓			§24.2.3.3
<i>nufitçaka</i> ‘prepare’	tr.	✓		✓	
<i>suyjy</i> ‘finish’	tr.	✓			
<i>k^hyt</i> ‘do repeatedly’	tr.	✓			§24.4.3
<i>jy</i> ‘be finished’	impers.	✓	✓		
<i>ŋgryl</i> ‘be usually the case’	impers.			✓	
<i>rṛygart</i> ‘be about to’	intr.				§24.4.2.1
<i>aywyu</i> ‘be about to’	intr.				§24.4.2.1
<i>mda</i> ‘arrive’ (of time)	impers.	✓		✓	

As shown in §24.2.2.2, verbs in this group have different coreference restrictions depending on the complement type: when transitive verbs select bare/dental infinitive complements, coreference is required between the subject of the complement clause and that of the matrix verb.

24.5.6.1 Experiential

The transitive verb *rpo* can be used with a nominal object in the meaning ‘try, taste’ (of food), as shown in (167) with the sigmatic causative *su-rpo* ‘let X taste’ (§17.2).

- (167) *azo ny-paxci ci tu-kui-sui-rpo-a*
 1SG 2SG.POSS-apple a.little IPFV-2→1-CAUS-taste-1SG
 ‘Let me taste your apples.’ (150904 zhongli-zh, 16)

As a complement-taking verb, *rpo* means ‘have already done...’ (like Chinese 曾经……过 céngjīng...guò), and commonly occurs with both bare/dental infinitival complements (§24.2.2) and velar infinitival complements (§24.2.1). These two complement types differ by their coreference restrictions: the former requires subject coreference (§24.2.2.2), while the latter does not.

34488 In example (168), the first sentence *ażo kx-mtsuy mu-puu-rno-t-a* is ambiguous,
 34489 and could be translated as either ‘I have never bitten it’ (subject coreference) or
 34490 ‘I have never been bitten by it’ (object coreference), regardless of the fact that the
 34491 1SG is transitive subject in both cases as shown by the absence of inverse prefix
 34492 and the presence of the -t- suffix (§14.3.2.1, §21.1.3). The verb *rno* ‘experience’ lacks
 34493 inverse other than generic subject (§14.3.2.5), and the 3→1SG inverse form *†mu-*
 34494 *pú-wy-rno-a* is rejected to express the meaning expressed by *mu-puu-rno-t-a* in
 34495 (168).

- 34496 (168) *ażo [kx-mtsuy] mu-puu-rno-t-a* *ri, xpyltcun ku*
 1SG INF-bite NEG-AOR-experience-PST:TR-1SG but p.n ERG
 34497 *pjx-rno*
 IFR-experience
 34498 ‘I have never been stung (by a wasp), but Dpalcan has.’ (26-ndzWrnaR,
 34499 19)

34500 In the second sentence, the personal name *xpyltcun* predictably takes the ergative
 34501, being the transitive subject of *rno* ‘experience’. However, it is at the same
 34502 time object of (elided) infinitive *kx-mtsuy* ‘to bite’ present in the first clause, and
 34503 the absolute form would be expected if the verb in the complement clause had
 34504 precedence over the matrix verb, as it happens in some cases (§24.3.2). The com-
 34505 plete clause without elision would *xpyltcun ku kx-mtsuy pjx-rno* ‘Dpalcan has
 34506 been stung (by a wasp) before’.

- 34507 (169) *xpyltcun ku [kx-mtsuy] pjx-rno*
 p.n ERG INF-bite IFR-experience
 34508 ‘Dpalcan has been stung (by a wasp) before’. (elicitation based on 168)

34509 The sentence (169) is also ambiguous, but can be interpreted as expressing
 34510 coreference between the transitive subject of *rno* ‘experience’ with the object of
 34511 the transitive verb *mtsuy* ‘’, with the ergative flagging of the matrix clause taking
 34512 over the absolute marking expected in the complement clause.

34513 The subject of *rno* ‘experience’ can also be coreferential with the possessor of
 34514 the intransitive subject in the complement clause, as in example (170), where the
 34515 non-overt subject should be *a-xtu* ‘my belly’, as in (171) (§22.4.1.5).

- 34516 (170) *ażo puu-xtci~xtci-a* *zo ri tuxtvym nuu-atuy-a tce,*
 1SG PST.IPFV-EMPH~be.small-1SG EMPH LOC dysentery AOR-meet-1SG LNK
 34517 *[nuu kx-mvym] puu-rno-t-a*
 DEM INF-hurt AOR-experience-1SG
 34518 ‘When I was very small, I had dysentery, (my belly) ached.’

34519 (24-pGArtsAG, 121)

- 34520 (171) [a-xtu kx-mjym] puu-rno-t-a.
 1SG.POSS-belly INF-hurt AOR-experience-PST:TR-1SG
 34521 ‘I have had belly ache.’ (elicited)

34522 However, despite the fact that *rno* indexes either the subject or the object of
 34523 its complement clause without difference in the matrix clause as illustrated by
 34524 (168) and (169) above, their relativization patterns are different. The subject of
 34525 the infinitive clause is relativized by means of the subject participle *puu-kuu-rno*,
 34526 while the object is relativized by using either a finite relative clause or the object
 34527 participle *puu-kx-rno* (§23.5.11.3).

34528 **24.5.6.2 Phasal verbs**

34529 Phasal verbs such as *za* ‘begin’ and *st^hut* ‘finish’ are most often attested with
 34530 dental or bare infinitives (§24.2.2.1) as in (172). They can also take velar infinitives
 34531 as in (173).

- 34532 (172) [nur u-ti] ta-st^hut
 34533 DEM 3SG.POSS-BARE.INF:say AOR:3→3'-finish
 ‘When she finished saying that...’ (150818 muzhi guniang-zh, 125)

- 34534 (173) [tui-nur kx-jts^hi] na-st^hut tce tce
 34535 INDEF.POSS-breast INF-give.to.drink AOR:3→3'-finish LNK LNK
 t^x-pytso nur li u-sta nuatcu ko-cui-rngur
 34536 INDEF.POSS-child DEM again 3SG.POSS-bed DEM:LOC IFR-CAUS-lay
 34537 ‘After she had finished breastfeeding, she put back the child on his bed.’
 (140429 jiedi-zh, 270)

34538 In addition, some phasal verbs are also attested with finite complements shar-
 34539 ing the same TAME and person indexation (§24.2.3.3), though this construction
 34540 is considerably rarer.

- 34541 (174) [nura pa-βzjoz] pa-st^hut tce u-sloxpun nur ku
 34542 DEM:PL AOR:3→3'-learn AOR:3→3'-finish LNK 3SG.POSS-teacher DEM ERG
 taqaf^β tui-ldzi p^y-wy-mbi
 34543 needle one-CL IFR-INV-give
 ‘When he finished learning this (craft), his teacher gave him a needle.’
 34544 (140508 benling gaoqiang de si xiongdi-zh, 97)

Unlike *rno* ‘experience’ for instance (which selects the orientation DOWNWARDS), phasal verbs take the lexical orientation of the verb in the complement clause (§24.3.5), UPWARDS in (172) (§15.1.5.8), EASTWARDS in (173) (§15.1.5.10) and DOWNWARDS in (174).

24.5.6.3 Imminent aspect

The intransitive verb *rnygat* means ‘prepare to depart’ when used on its own without subordinate clause. It also selects participial clauses like motion verbs (§24.4.2.1), with the meaning ‘be about to’. With subject participial clauses in *kui-* as in (175), there is coreference between the subject of *rnygat* and that of its subordinate clause.

- (175) [kui-si] *ty-rnygat*, *tu-ryru* *mui-nui-c^ha* *ri*, *nui*
 SBJ:PCP-die AOR-be.about IPFV-get.up NEG-AOR-can LNK DEM
wi-cya *ra puu-ts^boz* *zo*.
 3SG.POSS-tooth PL PST.IPFV-be.complete EMPH

‘Even when she was about to die (due to an advanced age), when she was not able to get up anymore, (...) she still had all her teeth.’
 (27-tWCGArgu, 23)

Like motion verb, *rnygat* ‘be about to’ also takes object participial clauses in *ky-* with coreference with the object of the clause ‘be about to be X’ as in (176).

- (176) *jy-tui-ari* *tce*, (...) *turme* [*ky-sat*] *ty-kui-rnygat* (...)
 AOR-2-go[II] LNK person SBJ:PCP-kill AOR-SBJ:PCP-be.about.to
ynuz tuu-mtym *ri*
 two 2-see[III]:FACT LNK
 ‘When you go there, you will see two person who are about to be killed.’
 (140507 jinniao-zh, 320)

The intransitive contracting verb *ayuyu* ‘be about to’ has the same meaning as *rnygat*, and is used in the same constructions (177), though it is slightly less frequent.

- (177) [*a-kui-ynduj*] *tu-tui-ayuyu* *nui-ηu* *tce*
 1SG.POSS-SBJ:PCP-hit IPFV-2-be.about.to SENS-be LNK
 ‘You are about to hit me.’ (2014-kWLAG, 506)

The meaning of the imminent aspect auxiliaries overlaps with that of the Proximative (§21.6.2, §21.6.2.1), as shown by examples (178) and (179) from the same passage of two versions of the same story, the former (178) with Periphrastic Proximative (§21.6.2.1) and the latter with *rɔŋgat* ‘be about to’.

- (178) *azo yuu-caβ-a* *ty-ŋu tce, nyzo χc^ha nu*
 1SG INV-catch.up:FACT-1SG AOR-be LNK 2SG right DEM
a-nu-tua-ct^huz
 IRR-PFV:WEST-2-turn.towards
 ‘When they are about to catch up with me, turn the (thing in your) right
 (hand) in (their direction).’ (2011-04-smanmi, 146)

- (179) [azo a-kw̚-caβ] *ty-rŋgat-nu* *tce, nyo kui sŋaε*
 1SG 1SG.POSS-SBJ:PCP-catch.up AOR-be.about.to-PL LNK 2SG ERG sorcery
kumtc^hoχsum a-nu-tu-ct^hwz
 triratna DEM IRR-PFV:WEST-2-turn.towards
 ‘When they are about to catch up with me, turn the triratna in (their direction).’ (2003 smanmi, 95)

24.5.6.4 Habitual aspect

The habitual aspect auxiliary *ŋgryl* ‘be usually the case’ is not compatible with infinitival complements. It only occurs with finite complements, as in (180).

- (180) [cyr tce tu] ηgryl, [tu-mbri]
 night LOC exist:FACT be.usually.the.case:FACT IPFV-call
 $\eta gryl$
 be.usually.the.case:FACT
 '(Owls) appear, howl during the night.' (22-pGAkhW, 19)

In the Past Perfective with an Imperfective complement, it expresses a former habit ‘use to *X*’ (181).

- (181) [azo kumpya c^hu-nu-χse-a] pu-ηgrvl
 1SG chicken IPFV-AUTO-feed[III]-1SG PST.IPFV-be.usually.the.case
 'I used to raise chickens / (for my own sake).' (150819 kumpGa, 69)

The auxiliary *ngryl*, especially in negative form, can have overtones of epistemic (182) or deontic modality (183).

- 34595 (182) *nvzo tur-mab maka* *mx-ŋgrvl ma,*
 2SG 2-not.be:FACT NEG-be.usually.the.case:FACT LNK 2SG
 34596 *nvzo ma ji-zda pui-kui-ryzi me*
 apart.form 1PL.POSS-companion AOR-SBJ:PCP-stay not.exist:FACT
 34597 ‘It is impossible that it is not you (who stole it), since there was nobody
 34598 apart from you in our vicinity.’ (31-deluge, 99)
- 34599 (183) *tc^heme u-cki “a-βyo” tu-kui-ti*
 girl 3SG.POSS-DAT 1SG.POSS-FB IPFV-GENR-say
 34600 *mx-ŋgrvl*
 NEG-be.usually.the.case:FACT
 34601 ‘(One cannot/It is not appropriate to) say ‘my uncle’ to a woman.’
 34602 (140425 kWmdza 02, 99)

34603 24.5.7 Similative verbs

34604 The verbs *fse* ‘be like’ and *stu* ‘do like’ are semi-transitive (§14.2.3) and secundative
 34605 (§14.4.2), respectively. Both select as semi-object the manner in which the action
 34606 is performed.

34607 These verbs are found with velar infinitive complements (§24.2.1), either with
 34608 a demonstrative expressing the action (such as *nuu* in 184) or in questions with
 34609 the interrogative pronoun *tc^hi* ‘what’ (§6.5.1) as in (185). The demonstrative or the
 34610 interrogative pronoun are always located closer to the similative verb than the
 34611 infinitive clause.

- 34612 (184) *tce [cymuyduu kx-lxt] nuu tu-stu-nuu nui-ŋu*
 LNK gun INF-release DEM IPFV-do.like-PL SENS-be
 34613 ‘People shoot with guns like that.’ (28-CAmWGdW, 96)
- 34614 (185) *[kx-p^hyo] tc^hi a-tx-fse-j?*
 INF-flee what IRR-PFV-be.like-1PL
 34615 ‘How will we flee?’ (Norbzang 69)

34616 The subject of the infinitival clause is always coreferent with that of *fse* or *stu*,
 34617 but its object is never indexed on the matrix verb. For instance, although *fsray*
 34618 ‘protect’, ‘save’ and *buwa* ‘carry on the back’ are transitive verbs that can index
 34619 first or second person objects (see for instance 44, §14.3.2.3), in (186) and (187)
 34620 the 2SG object is not indexed on the matrix verb *stu*, otherwise the forms *tu-ta-stu*
 34621 (IPFV-1→2-do.like) and *a-tx-tú-wy-stu* (IRR-PFV-2-INV-do.like) would be expected.

24 Complement clauses

34622 These examples show that the complement clause saturates the direct object of
 34623 *stu*.

- 34624 (186) [nyzo kx-fsran] tc^{hi} tu-ste-a?
 2SG INF-protect what IPFV-do.like[III]-1SG
 34625 ‘How (can) I save you?’ (150901 dongguo xiansheng he lang-zh, 41)

- 34626 (187) pyxtcuu kuu [nyzo ky-burwa] tc^{hi} a-ty-ste
 bird ERG 2SG INF-carry.on.the.back what IRR-PFV-do.like[III]
 34627 cti?
 be.AFF:FACT
 34628 ‘How will the bird carry you on its back?’ (2003 zrAntCWtWrme, 132)

34629 Alternatively, *stu* can also index as object the object of the verb in the infinitival
 34630 clause, as shown by (188), a sentence whose meaning is the same as that of (186).

- 34631 (188) [nyzo kx-fsran] tc^{hi} tu-ta-stu?
 2SG INF-protect what IPFV-1→2-do.like[III]
 34632 ‘How (can) I save you?’ (elicitation based on 186)

34633 Deixis manner verbs are also often used in a variety of complementation strate-
 34634 gies. First, they occur with a coordinated clause (generally in the Factual Non-
 34635 Past) expressing the purpose of the action, as in (§24.4.4). Second, they can take
 34636 as semi-object a totalitative relative (§23.3.2) as object (§24.4.1) as in (190) in the
 34637 meaning ‘do everything in the same way as X’ (where X is the transitive subject
 34638 of the relative). Third, *fse* and *stu* are found in serial verb constructions (§25.4.1.2).

- 34639 (189) tc^{hi} ci zo tú-wy-stu tce p^hyn
 what INDEF EMPH IPFV-INV-do.like LNK be.efficient:FACT
 34640 ‘What kind of thing should (we) do to successfully (treat your disease)?’
 34641 (2011-04-smanmi, 9)

- 34642 (190) [ty-wuu nuu kuu tur~ta-stu] zo
 INDEF.POSS-grandfather DEM ERG TOTAL~AOR:3→3'-do.like EMPH
 34643 to-stu
 IFR-do.like
 34644 ‘He did everything like the old man.’ (140511 xinbada-zh, 255, 255)

34645 24.5.8 Complement-taking adjectival verbs

Some adjectival stative verbs like *mkʰyrz* ‘be expert, be knowledgeable’ are semi-transitive (§14.2.3) and optionally take either a noun (191) or a complement clause (192) as semi-object in addition to their subject. The complement clause can be either infinitival (§24.2.1) or finite (§24.2.3).

- 34650 (191) *wi-nma_v* *jy-kui-ye* *nui conj_zu* *mk^hyz*
 3SG.POSS-husband AOR-SBJ:PCP-come[II] DEM carpentry be.expert:FACT
 34651 *tce*
 LNK
 34652 ‘Her husband who came (to live in her family) is very good at carpentry.’
 34653 (14-siblings, 273)

34654 (192) *tci_{zo} rcanu,* [*ky-ta_v*] *wuma zo* *mk^hyz-tci*
 1DU UNEXPECTED INF-weave really EMPH be.expert:FACT-1DU
 34655 ‘We are very good at weaving’ (140521 huangdi de xinzhuang-zh, 20)

Adjectives such as *nqa* ‘be difficult’, *mbat* ‘be easy’, which unlike *mk^hyz* ‘be expert’ do not have a semi-object, can take infinitival or finite complement clauses as their subject (193).¹⁵

- 34659 (193) <*gang*> *st^huci* *múj-rko* *q^he, pui-mpui* *q^he*
 steel as.much NEG:SENS-be.hard LNK SENS-be.soft LNK
 34660 [*tu-ŋgγy, pui-χju*] *nura* *pui-mbat*
 IPFV-ACAU:bind IPFV-be.curved DEM:PL] SENS-be.easy
 34661 ‘(Iron) is not as hard as steel, it is soft and bends easily.’ (30-Com, 42)

Even in nominalized forms such as the degree nominals (§16.3), these verbs retain the ability to take subject complements (§16.3.2), as in (194).

- 34664 (194) [c^hw-wxti] w-tu-mbat juw-syre zo
 IPFV-be.big 3SG.POSS-NMLZ:DEG-be.easy SENS-be.ridiculous EMPH
 34665 ‘It grows extremely easily.’ (25-akWzgumba, 77)

34666 Other adjectival stative verbs selecting infinitival complements as intransitive
34667 subjects include *anaj* 'be done quickly' (195) or *pe* 'be good' (196).

¹⁵Note that this construction has a meaning close to that of the facilitative *nuyu*- derivation (§18.9).

- 34668 (195) [ky-nurdor] ri my-apaj ma ku-ndui-ndu β
 INF-pick.up also NEG-be.quick:FACT LNK SBJ:PCP-EMPH~be.small
 34669 cti
 be.AFF:FACT
 34670 ‘It takes a lot of time (it is not done quickly) to pick up (the
 34671 Zanthoxylum seeds), because they are very small.’ (07-tCGom, 16)

- 34672 (196) t τ t ϕ u- η guu nuutcu [staxpuu ky-ji] my-pe
 earth.type 3SG.POSS-in DEM:LOC pea INF-plant NEG-be.good:FACT
 34673 ‘Planting peas in t τ t ϕ -type earth is not good.’ (25-cWXCWz, 64)

34674 Some adjectival verb such as $\kappa\gamma\beta$ ‘be careful’ select bare infinitive comple-
 34675 ments (§16.2.2) like their causative form (§24.5.1.4).

24.6 Complement-taking nouns

34677 Not all noun-modifying clauses should be analyzed as relative clauses: only sub-
 34678 ordinate clauses whose head noun (overt or covert) has a syntactic role in the
 34679 clause (whether argument, adjunct or possessor) can be considered to be a rela-
 34680 tive.

24.6.1 Complement-taking nouns and denominal verbs

34681 In examples (197) and (198), the head noun *ftçaka* ‘method’, ‘manner’ is neither a
 34682 core argument nor an adjunct. It is not possible to convert the infinitive subordi-
 34683 nate clauses *mu-tu-ky-mbro* ‘not become too high’ and *qarts β ky-ky- β zu ra ky-ty β*
 34684 ‘thresh the (grains) that have been harvested’ into independent sentences that
 34685 would include *ftçaka*. These clauses should therefore be analyzed as adnominal
 34686 complement clauses, rather than a prenominal relatives.

- 34688 (197) a-<*xuetang*> u-*tuu-mbro* <*kongzhi*>
 1SG.POSS-blood.sugar 3SG.POSS-NMLZ:DEG-be.high control
 34689 *tu- β ze-a* η u. [*mu-tu-ky-mbro*] *ftçaka* *tu- β ze-a*
 IPFV-do[III]-1SG be:FACT NEG-IPFV-INF-be.high manner IPFV-do[III]-1SG
 34690 η u.
 be:FACT
 34691 ‘I control my blood sugar, I do what I can to prevent it from being too
 34692 high’. (conversation, 15-12-05)

- 34693 (198) [qartsyβ kyr-kyr-βzu ra kyr-tvβ] **ftçaka** yuu-βzu
 harvest AOR-OBJ:PCP-make PL INF-thresh manner INV-make
 34694 *ra*
 be.needed:FACT
 34695 ‘Then one has to prepare to thresh the (grain) that have been harvested.’
 34696 (2010.10, 101)

34697 The construction exemplified by (197) and (198) is a collocation combining the
 34698 complement-taking noun *ftçaka* with the verb *βzu* ‘make’, meaning either ‘do
 34699 by any means possible’ (as in 197) or ‘prepare to X’ (198). In the latter mean-
 34700 ing, the collocation is homonymous with the transitive denominal verb *nuftçaka*
 34701 ‘prepare’ (§20.7.2), which also selects velar infinitive complements, as shown by
 34702 (199), uttered just before (198) in the same recording.

- 34703 (199) [kyr-tvβ] *kú-wy-nuftçaka* *ra*
 34704 INF-thresh IPFV-INV-prepare be.needed:FACT
 ‘One has to prepare the threshing.’ (2010.10, 100)

34705 The infinitive complement *kyr-tvβ* in (199) is exactly parallel to the adnominal
 34706 complement clause in (198). This parallelism between complement-taking noun
 34707 and the complement-taking denominal verb derived from it is not found in all the
 34708 cases (§24.6.3), but confirms the observation that the adnominal clause in (198)
 34709 is not a prenominal relative.

34710 24.6.2 Adnominal complement clause and possessor

34711 Among complement-taking nouns, some like *ftçaka* ‘method’, ‘manner’ (§24.6.1,
 34712 §24.6.3.1) and *kowa* ‘manner’ (§24.6.3.1) are alienably possessed nouns, but most
 34713 (§24.6.3) are inalienably possessed (§5.1.2.6).

34714 Among these inalienably possessed nouns, two categories must be distinguished.
 34715 First, some nouns such as *wi-skrt* ‘language’, ‘sound’ (§24.6.3.2) always take a 3SG
 34716 possessive prefix coreferent with the complement clause (treated as possessor of
 34717 the noun), as in (200).

- 34718 (200) *ji-wi* *kiw* “*a-my-jy-tuu-yi-nuu*” **wi-skrt**
 34719 1PL.POSS-grandfather ERG IRR-NEG-PFV-2-come-PL 3SG.POSS-language
 to-βzu *cti*
 IFR-make be.AFF:FACT
 34720 ‘(By these words) our father-in-law means that he does not want us to
 34721 come back (he means: ‘don’t you come (back)’’. (2005 tAwakWcqrar, 30)

34722 Other nouns like *u-sum* ‘mind’ (§24.6.3.3) on the other hand select as posses-
 34723 sor the experiencer, which may not be 3SG, and the complement clause is not
 34724 syntactically a possessor. For instance, in (201) the possessor of *-sum* is 2SG, not
 34725 3SG as would be expected if the finite clause *nū-βdaṣmu nū tu-tu-nḍym* where the
 34726 possessor of this noun.

- 34727 (201) [nū-βdaṣmu nū tu-tu-nḍym] **ny-sum** ú-ce?
 3PL.POSS-queen DEM IPFV-2-take[III] 2SG.POSS-mind QU-go:FACT
 34728 ‘Do you want to become their queen?’ (150818 muzhi guniang-zh, 509)

34729 24.6.3 Overview of complement-taking nouns

34730 Complement-taking nouns selecting infinitive (§24.2.1), finite (§24.2.3) or reported
 34731 speech complements (§24.2.5) can be divided into three semantic groups.

34732 24.6.3.1 Nouns of manner

34733 The semantically close alienably possessed nouns *ftṣaka* ‘method’, ‘manner’ (§24.6.1)
 34734 and *kowa* ‘manner’,¹⁶ both borrowed from Tibetan (from ས୍କୋ བ୍ରୋ ຂ ບ୍ୟାଙ୍କ ບ୍ୟାଙ୍କ ‘implement’
 34735 and རୋ རୋ ບ୍ୟାଙ୍କ ບ୍ୟାଙ୍କ ‘arrangement’, ‘method’, respectively), occur in collocation with
 34736 the verb *βzu* ‘make’ (§22.4.2.1) in the meanings ‘try to X by any means’ (in Chi-
 34737 nese 想尽办法 <xiǎng jìn bànfǎ> ‘try to do by any means’) or ‘prepare’. They
 34738 can select an infinitive clause with raising of the person indexation on the main
 34739 verb, as shown by the 3→2SG form *tú-wy-βzu* ‘they will X you’ in (202).

- 34740 (202) a-r̩it ra nū-yi-nū cti tcet^ha, [ky-ndza]
 1SG.POSS-offspring PL VERT-come:FACT-PL be.AFF:FACT soon INF-eat
 34741 kowa tú-wy-βzu cti tce ku-ta-su-ynbaš
 manner 2-INV-make:FACT be.AFF:FACT LNK IPFV-1→2-CAUS-hide
 34742 nyu
 be:FACT
 34743 ‘My children are coming back home soon, and they will try to eat you, I
 34744 will hide you.’ (Norbzang 2012, 300)

34745 The complement-taking transitive denominal verbs *nūftṣaka* ‘prepare’ and *nukowa*
 34746 ‘prepare’ (§24.6.1) can be derived from these two nouns.

¹⁶These nouns are both translated into Chinese as 办法 <bànfǎ> ‘method’, ‘means’, ‘manner’.

34747 24.6.3.2 Nouns of speech and sound

34748 The inalienably possessed nouns related to speech and noise *wi-ti* ‘way of saying’,
 34749 ‘wording’, ‘expression’, *wi-fçrt* ‘story’, *wi-skrt* ‘language’, ‘sound’, *tr-zgra* ‘sound’,
 34750 ‘noise’ and *tui-tçh'a* ‘news’ (about someone) (§5.1.2.13), and the alienably possessed
 34751 *k'hycryl* ‘discussion’ can occur with finite complement clauses (203, 204) (see also
 34752 18, §10.1.2.10) or reported speech complements (205).

- 34753 (203) *tceri* [zlawicryrβ kui tc^hoz puw-asu-wzgruβ]
 but Zlaba.shesrab ERG religion PST.IPFV-PROG-accomplish
 34754 *wi-fçrt* tu ma [jum puw-asu-car]
 3SG.POSS-story exist:FACT but wife:HON PST.IPFV-PROG-search
 34755 *wi-fçrt* me
 3SG.POSS-story not.exist:FACT
 34756 ‘People say that Zlaba shesrab was studying religion, not that he was
 34757 looking for a wife.’ (sras 79-80)
- 34758 (204) [*jnu-nuqambumbjom*] *wi-zgra* nui “vurwurwur” *tu-ti*
 IPFV-fly 3SG.POSS-noise DEM ONOM IPFV-say
 34759 *ŋgryl*.
 be.usually.the.case:FACT
 34760 ‘The sound it makes when it flies is ‘vrvr’ (as its flying sound, it says
 34761 ‘vrvr’).’ (26-quspunmbro, 13)

34762 As shown by (203) and (204), *wi-fçrt* ‘story’ and *tr-zgra* ‘sound’ can take complements even without a noun-verb collocation.

34763 The noun *wi-skrt* ‘language’, ‘sound’ mainly takes complements when occurring with *βzu* ‘make’ (§22.4.2.1) or *stu* ‘do like’. The collocation with this verbs means ‘do/say something that means X’ as in (205)¹⁷ or (200) (in §24.6.2 above).

- 34767 (205) [*wortc^hi zo pŋjk^hu ma-tr-tui-lx tce, nykinu, pŋjk^hu*
 please EMPH yet NEG-IMP-2-release LNK FILLER yet
 34768 *a-pui tui-nui jnur-jts^hi-a*
 1SG.POSS-young INDEF.POSS-breast IPFV-give.to.drink-1SG
 34769 *ra] wi-skrt ra to-βzu tce [...] tce nuunu*
 be.needed:FACT 3SG.POSS-speech PL IFR-make LNK LNK DEM

¹⁷The poignant anecdote in (205) shows that the collocations *wi-skrt+βzu* and *wi-skrt+stu* are used even when the expression is not linguistic but based on gesture and facial expression. The hunter did not have the heart to shoot the monkey mother (see example 82 in §10.4.3).

- | | | |
|-------|--|---|
| 34770 | <i>nua-jyy tce tcendyre u-wuu</i> | <i>nua ki kui-fse</i> |
| | AOR-finish LNK LNK | 3SG.POSS-young DEM DEM.PROX SBJ:PCP-be.like |
| 34771 | <i>jyy-yyntaβ, tce [tx-lxt jyy]</i> | <i>u-skrt</i> |
| | IFR-put LNK IMP-release be.allowed:FACT | 3SG.POSS-speech |
| 34772 | <i>kura to-stu</i> | |
| | DEM.PROX:PL IFR-do.like | |
| 34773 | '(The monkey mother) made (sign to the hunter) meaning 'Please don't shoot yet, I still have to breastfeed my young one.' (...) and once she had finished, she put her young one aside like that, and made a sign like that meaning '(now) you can shoot'. (19-GzW, 73-74) | |
| 34774 | | |
| 34775 | | |
| 34776 | | |

The noun *tuu-tçʰa* ‘news’ takes reported speech clauses when used in collocation with *yut* ‘bring’ in the meaning ‘(go somewhere) and come back to tell about X’, as in (206) (see also 50, §5.1.2.13). This construction is also compatible with participial complementation strategies (§24.6.4).

- 34781 (206) <*donggua*> *c^ho* <*qiezi*> *ni* *tc^hi* *zo* *múj-naxtcuy*] *yuu*
gourd COMIT eggplant DU what EMPH NEG:SENS-be.the.same GEN
34782 *wu-tc^ha* *a-jy-tur-yuit* *ra*
3SG.POSS-information IRR-PFV-2-bring need:FACT
34783 ‘(Go there and come back to) to tell me in what way gourds and
34784 eggplants are different.’ (yici bi yici you jinbu-zh, 7)

34789 24.6.3.3 Nouns of cognition

The noun of cognition *tu-sum* ‘mind’ occur in collocation with the motion verb *ce* ‘go’ in the meaning ‘want to X’ (§22.4.1.1) with either finite clause as in (207) and (209a) (see also 201 in §24.6.2) or an infinitival one as in (208)(209b).

- 34793 (207) [[*nyzo ju-tui-ce*] *a-sum* *múij-ce*]] *ndža* *ŋu*
 2SG IPFV-2-go 1SG.POSS-mind NEG:SENS-go reason be:FACT
 34794 ‘This is because I don’t want you to leave.’ (140506 shizi he huichang de
 34795 bailingniao-zh, 71)

- 34796 (208) [“ya” *kry-ti*] *uu-sum* *muu-pjy-ce*
 yes INF-say 3SG.POSS-mind NEG-IFR.IPFV-go
 34797 ‘He did not want to say ‘yes’.’ (140506 shizi he huichang de
 34798 bailingniao-zh, 71) 58)

34799 The possessive prefix on the complement-taking noun encodes the experi-
34800 ence, while the motion verb *ce* ‘go’ remains in 3SG form. When the complement
34801 clause is an infinitival clause, its subject must be coreferent with the experiencer
34802 in the main clause as in (209b) and (208). However, when the complement clause
34803 is finite, subject coreference is possible (209a, 201) but not required (207).

- 34804 (209) a. [c-ku-nu-rŋgw-a] *a-sum* *múj-ce*
 TRAL-IPFV-AUTO-lie.down-1SG 1SG.POSS-mind NEG:SENS-go

34805 b. [cɪr-ky-rŋgw] *a-sum* *múj-ce*
 TRAL-INF-lie.down 1SG.POSS-mind NEG:SENS-go

34806 ‘I don’t want to go to sleep.’ (elicited)

The verb *æ* ‘go’ in this construction is never found in the Aorist or the Inferential. To express an inchoative meaning, the motion verb *yi* ‘come’ occurs instead with *tuu-sum*, as in (210).

- 34810 (210) *daltsutsa tce tce ky-nu-ce tsa ui-sum to-yi.*
 slowly LNK LNK INF-VERT-go a.little 3SG.POSS-mind IFR-come
 34811 ‘He slowly started thinking of going home.’ (150907 laoshandaoshi-zh,
 34812 59)

Like *tu-sum*, the noun *w-bjiz* ‘wish’ (a fossil -z nominalization, §16.5.1) occurs in collocation with *yi* ‘come’ (§22.4.1.1). This collocation, which means ‘feel like/want to X’, has the same morphosyntactic properties as those described above: it is compatible with both infinitive complement clauses (211) and finite ones (212).

- 34817 (211) [ky-nyma] *tua-ŋjiz* *maka my-yi.*
 INF-work GENR.POSS-wish at.all NEG-come[III]:FACT
 34818 ‘(When one is sick), one does not feel like working.’ (27-tWfCAL, 19)

- 34819 (212) *icq^ha* [χpuŋ kuu-ts^hu] *nua* *kuu* *tui-ci*
 the.aforementioned monk SBJ:PCP-be.fat DEM ERG INDEF.POSS-water
 34820 *c-tu-re]* *nua* *w-ɛjiz* *mua-pjy-yi*
 TRAL-IPFV:UP-bring[III] DEM 3SG.POSS-wish NEG-IFR.IPFV-come
 34821 ‘The fat monk did not feel like (going down the river and) bring the
 34822 water (up to the monastery).’

34823 24.6.3.4 Time

34824 The noun *ta-βa* ‘free time’ can take infinitival complements, in particular when
 34825 occurring in collocation with existential verbs (§22.4.1.3) as in (213).

- 34826 (213) [βduarjyt azo ky-ce] a-βa *majε*
 TOPO 1SG INF-go 1SG.POSS-free.time not.exist:SENS
 34827 ‘I don’t have time to go to Gdongbrgyad.’ (conversation, 2016-03-20)

34828 24.6.3.5 Cause

34829 The noun *wi-ndža* ‘reason’, which is used as a relator noun to indicate the cause
 34830 or the beneficiary (§8.3.6.2) with noun phrases, is also attested with finite and
 34831 infinitive complement clauses, as in (214). With ergative marking, they can either
 34832 serve as causal (§25.5.2) or purposive (§25.5.4) subordinate clauses.

- 34833 (214) *tce nu [rjydum mui-pui-ky-βzu]* *wi-ndža* *kui*
 LNK DEM lumps NEG-IPFV-INF-make 3SG.POSS-reason ERG
 34834 *tui-ci* *kui-mučtaš* *nautcu pjúr-wy-fkri tce tce*
 INDEF.POSS-water SBJ:PCP-be.cold DEM:LOC IPFV-INV-melt LNK LNK
 34835 *rjydum my-βze*
 lumps NEG-make[III]
 34836 ‘In order to prevent lumps from forming, one melts the flour in cold
 34837 water (by mixing it) and lumps do not form.’ (140428 rJAdWm, 9)

34838 24.6.4 Relative clauses as a complementation strategy

34839 Like complement-taking verbs (§24.4.1, §23.8.3), some inalienably possessed nouns
 34840 can take subordinate clauses that look like complement clauses but are in fact rel-
 34841 atives. For instance, in (215), the clause *tu-ndze* ‘(the thing that) he eats’ is formally
 34842 a headless finite object relative clause (§23.5.3). The head noun *tr-di* ‘smell’ has
 34843 no syntactic role in that clause and is not the relativized element, otherwise the
 34844 construction would be nonsensical, its expected meaning being something like
 34845 ‘the smell that he eats’. The relation between the prenominal clause and its head
 34846 in (215) is simply the same as that between a possessor and its possessee (§8.2.3.1),
 34847 and it is preferable not to analyze here *tu-ndze* as a complement clause, since its
 34848 meaning is not ‘the smell of him eating’ (on the ambiguity between finite relative
 34849 and complement clauses, see §23.8.1).¹⁸

¹⁸The precise meaning of this sentence has been ascertained with Tshendzin. The corresponding passage in the Chinese text from which it has been translated is 果酱味招来了一群苍蝇

- 34850 (215) [tu-ndze] nuu yuu ur-di nuu pjy-mts^hym-nuu tce tce
 IPFV-eat DEM GEN 3SG.POSS-smell DEM IFR-perceive-PL LNK LNK
 34851 jo-yi-nuu.
 IFR-come-PL
 34852 ‘(The flies) smelled (the jam) that he was eating and came.’ (140428
 34853 yonggan de xiaocaifeng-zh, 12)

34854 Example (216) provides a similar case with a head-internal finite relative. It is
 34855 obvious here that *u-χpi* cannot be the relativized element (since the head noun
 34856 *ckom* ‘muntjac’ is overt). At the same time, if *azo ckom tu-mts^hi-a* were a comple-
 34857 ment clause, the expected meaning would be ‘a story about (why) I am leading
 34858 this muntjac’.

- 34859 (216) kuuki [azo ckom tu-mts^hi-a] ki yuu ur-χpi
 34860 DEM.PROX 1SG muntjac IPFV-lead-1SG DEM.PROX GEN 3SG.POSS-story
 34861 ci pjuu-feat-a
 34862 INDEF IPFV-tell-1SG
 ‘I will tell a story about this muntjac that I am leading.’ (140512 fushang
 he yaomo-zh, 81)

34863 The adnominal clauses in (215) and (216) are thus relative clauses used as pos-
 34864 sessors of inalienable nouns.

34865 With non-finite clauses, given the similarity between participles and infini-
 34866 tives (§16.2.1.1), there are cases where deciding whether a clause is a participial
 34867 relative serving as possessor or an infinitival complement clause is not trivial (on
 34868 ambiguity between participial clauses and infinitival complements, see §23.8.2).

34869 For instance, in (217), the Chinese borrowing 标准 <biāozhǔn> ‘criterion’ takes
 34870 as possessor the clause(s) tç^heme kui-pe mx-kui-pe, whose status is ambiguous. If
 34871 one analyses the form *kui-pe* as a subject participle (§16.1.1), *tç^heme [kui-pe] [mx-*
 34872 *kui-pe]* can be seen as two post-nominal participial relative clauses in apposition
 34873 sharing the same head noun, implying a translation ‘the criterion (distinguishing
 34874 between) good and bad women’. If on the other hand *kui-pe* is analyzed as a stative
 34875 infinitive (§16.2.1), the subordinative clauses are infinitival complements, and the
 34876 translation would rather be ‘criterion (by which one judges whether) a woman is
 34877 good or bad’. In this particular case, since both syntactic analyses are meaningful,
 34878 the fact that the postclausal noun is a Chinese borrowing makes it difficult to
 34879 reliably use elicitation to distinguish between the two possibilities (for instance,

<guōjiàngwèi zhāolái le yīqún cāngyíng> ‘The smell of the jam attracted a swarm of flies’: the
 adnominal construction in (215) is thus not due to calquing from the original.

24 Complement clauses

34880 by testing whether a dynamic intransitive verb would rather have a *kṛ-* prefixed
34881 form in this context).

- 34882 (217) [t_c^heme kuu-pe my-kuu-pe] nuu yuu koŋla zo
woman ?-be.good NEG-?-be.good DEM GEN really EMPH
34883 u-*<biaozhun>* nuu-ŋu
3SG.POSS-criterion SENS-be
34884 ‘It is (one of the) criteria (by which one judges whether) a woman is
34885 good or bad.’ (thaXtsa 2002, 100)

34886 Tests can be applied to non-finite adnominal clauses occurring with *tuu-tc^ha*
34887 ‘news’. This noun, in addition to finite complement clauses (§24.6.3.2), is com-
34888 patible with non-finite clauses in *kuu-* or *kṛ-* as in (218). The fact that non-stative
34889 intransitive verbs in this construction have *kuu-* rather than *kṛ-* however (*jy-kuu-ye*
34890 instead of *jy-kṛ-ye*) shows that these clauses are participial clauses, and there-
34891 fore that they should be analyzed as relative clauses like (215) and (216) above,
34892 despite what the meaning of this construction suggests. The constituent [*a-tcuu*
34893 *tr-kuu-ye*] *u-tc^ha* in (218) thus literally means ‘news about my son who came’.

- 34894 (218) [a-tcuu jy-kuu-ye] yuu u-tc^ha ja-yuit
1SG.POSS-son AOR-SBJ:PCP-come[II] GEN 3SG.POSS-news AOR:3→3'-bring
34895 ‘S/he came to tell (me/you) that my son came.’ (elicited)

34896 24.7 Syntactic errors

34897 Example (219) presents an interesting case of incorrect exchange of prefix be-
34898 tween the verb in the complement clause and the complement-taking verb.

34899 Since the complement-taking verb *st^hut* ‘finish’ is embedded in a temporal
34900 clause in *cunŋgu* ‘before’, it would be expected to be in the Imperfective (§25.3.2.1),
34901 while its complement verb should either be in the bare infinitive or the velar
34902 infinitive as in (220) (§24.5.6.2).

- 34903 (219) †[uzo kuu [nura tu-ryt] kṛ-st^hut] cunŋgu tce
3SG ERG DEM:PL IPFV-draw INF-finish before LNK
34904 ‘Before he had finished drawing it.’ (160718 huashetianzu-zh, 29)
- 34905 (220) [uzo kuu [nura kṛ-ryt] tu-st^hut] cunŋgu tce
3SG ERG DEM:PL INF-draw IPFV-finish before LNK

34906 In (219) however, the complement-taking verb is in Velar Infinitive form and
34907 the complement verb in the Imperfective, the opposite of the correct form (220).

34908 Tshendzin has no hesitation to recognize (219) as a speech error, which is nev-
34909 ertheless unusual enough to deserve mention.

³⁴⁹¹⁰ 25 Other types of multicausal constructions

³⁴⁹¹² 25.1 Classification of multicausal constructions

³⁴⁹¹³ This chapter, based on Jacques (2014a), discusses multicausal constructions other than (headless or noun modifying) relative clauses, complement clauses in core argument function and clauses involving the expression of degree (discussed in chapters 23, 24 and 26, respectively).¹

³⁴⁹¹⁷ The constructions treated in this chapter involve different degrees of subordination, from highly dependent (§25.1.1) to loose parataxis (§25.1.6). This section provides an overview of the criteria that can be used to classify subordination subtypes in Japhug.

³⁴⁹²¹ 25.1.1 Marked subordinate clauses

³⁴⁹²² Some subordinate clauses can be distinguished from main clauses by overt morphological marking. Four types of overt marks of subordination can be distinguished.

³⁴⁹²⁵ First, converbs (§16.2.1.7), found in particular in temporal (§25.3.3.2, §25.3.4.2) and manner (§25.4.2) clauses, being non-finite forms, cannot serve as predicate of main clauses.

³⁴⁹²⁸ Second, verb-initial reduplication (§12.4.1.2) and the prefix *w-* in non-Interrogative clauses (§21.7.4) are non-ambiguous markers of the protasis of a conditional construction (§25.2.1).

³⁴⁹³¹ Third, relator nouns with prenominal complements (§24.6) or prenominal relatives (§23.2.4) in absolute, locative or ergative form are used to build temporal (§25.3.3.1, §25.3.4.1) and causality (§25.5.2, §25.5.4) clauses.

³⁴⁹³⁴ Fourth, postpositions can either contribute to subordination marking in combination with relator nouns (for instance, the ergative in causal clauses, §25.5.2),

¹Some relative and complement clauses in essive function, or with oblique cases, are however discussed in this chapter (§25.1.1).

25 Other types of multiclausal constructions

34936 or serve on there own as subordinating markers, as in the case of the locative
34937 position in temporal clauses (1, see also §25.3).

- 34938 (1) *a-βi* *kui* [jy-ari] *nutcu* *tce*, *n̥kinu*,
1SG.POSS-younger.sibling ERG AOR-go[II] DEM:LOC LOC FILLER
34939 *qapi* *jo-rymbumbri* *q^he*, *tcendyre* *nui* *jo-nuinq^hu-j* *qhe*,
white.stone IFR-drop.while.going LNK LNK DEM IFR-follow-1PL LNK
34940 *tce* *k^ha* *jy-azyut-i*
LNK house AOR-reach-1PL
34941 ‘When *he_i* went (to the forest), our younger brother_i dropped white
34942 stones_j one by one on the way as he was going, and we followed them_j
34943 and found our way home.’ (160701 poucet2, 42)

34944 Example (1) also illustrates that in addition to the markers listed above, word
34945 order and case marking are important additional clues of subordinating status.
34946 The subject *a-βi* ‘my younger brother’ takes ergative case following the transitive
34947 verb *jo-rymbumbri* ‘he dropped them one by one on the way’ (§8.2.2.2), instead of
34948 absolute case as would be expected if it belonged to the subordinate clause *jy-ari*
34949 *nutcu* ‘when he went there’ (since *jy-ari* is intransitive), showing that this clause
34950 is embedded within the main clause. In some cases the case marking mismatch
34951 is the only evidence that a clause is subordinate (§25.1.4).

34952 25.1.2 Correlative clauses

34953 Correlative constructions comprise two or more clauses with a parallel syntac-
34954 tic structure, each obligatorily marked by overt coordinating markers. With the
34955 exception of correlative relatives (§23.2.5), correlative constructions are not very
34956 widespread in Japhug: usually only one of the two clauses has obligatory mark-
34957 ing.

34958 The correlative additive focus markers *ri* and *tci* (§9.1.6.2, §25.6.2) are one of
34959 the clearest case of correlative constructions. As shown by (3), they follow the
34960 noun phrase on which they have scope, and the rest of the clause, including the
34961 verb, can be repeated as in (2).

- 34962 (2) *zakastaka* *u-mdor* *tci* *my-kui-naxtcuy* *yzyu*,
each.his.own 3SG.POSS-colour also NEG-SBJ:PCP-be.the.same exist:SENS
34963 *u-ts^huya* *tci* *my-kui-naxtcuy* *yzyu*.
3SG.POSS-shape also NEG-SBJ:PCP-be.the.same exist:SENS
34964 ‘Each of them (species of starfishes) have their own different colours and
34965 different shapes.’ (180421 haixing, 45)

34966 Other examples of correlative construction include the relator noun *u-juja*
 34967 ‘along with’ with incremental initial reduplication (§12.4.1.4) in the second clause
 34968 (§25.3.4.2).

34969 25.1.3 Periphrastic tenses and subordination

34970 Japhug has quite a few periphrastic TAME categories, combining a verb in the
 34971 Imperfective or the Factual with a copula (§21.2.2, §21.4.1.7, §21.5.3.5, §21.6.2.1). It
 34972 is common to observe chains of verbs in the Imperfective sharing a single copula.
 34973 For instance, in (3), the copula *nui-cti* in the Sensory has scope over two verbs,
 34974 *pjuu-nuucurŋjo* and *pjuu-ŋgra*. Such chains can be long, and comprise more than ten
 34975 verbs in the Imperfective (example 10, §21.2.2).

- 34976 (3) *tceri qartsuu tce tce uu-jwab nui pjuu-nuucurŋjo tce*
 LNK winter LOC LNK 3SG.POSS-leaf DEM IPFV-redden LNK
 34977 *pjuu-ŋgra nui-cti.*
 IPFV-ACAU:cause.to.fall SENS-be.AFF
 34978 ‘In winter, its leaves redder and fall.’ (14-sWNgWJu, 12)

34979 In (4), the copula *nui-nu* occurs two times: the first occurrence has scope over
 34980 one verb (*tu-nui-łob*), and the second one over two verbs (*c-tu-nurdoż* and *tu-ndze*).

- 34981 (4) *nunuu la-clu-nui cʰo la-lyɑ-nui tce tce qandze*
 DEM AOR:3→3'-plough COMIT AOR:3→3'-dig LNK LNK earthworm
 34982 *tu-nui-łob nui-nyu. tce nui c-tu-nurdoż tce*
 IPFV-AUTO-come.out SENS-be LNK DEM TRAL-IPFV-collect LNK
 34983 *tu-ndze nui-nyu.*
 IPFV-eat[III] SENS-be
 34984 ‘When (people) plough and dig the earth, earthworms come out, and
 34985 crows go (into the fields), pick (the earthworms one by one) and eat
 34986 them.’ (140511 qajdo kW qandzxe tundze, 21-22)

34987 Although all verbs in examples (3) and (4) are finite, only the last verb of the
 34988 chain can be considered to be fully conjugated, while the non-final verbs (*pjuu-*
 34989 *nuucurŋjo* in 3 and *c-tu-nurdoż* in (4) lack an element of their conjugation. For this
 34990 reason, it is possible to consider that the last member of a periphrastic TAME
 34991 chain is the main verb, and that all preceding clauses are subordinate.

34992 25.1.4 Unmarked embedded clauses

34993 Embedded clauses such as *tç^{hi} a-tr-fse-a* in (5) lack any formal subordinating mor-
 34994 phology. However, their subordinating status is shown by the fact that they occur
 34995 inside the main clause, located between two constituents: in (5), the embedded
 34996 clause is preceded by the transitive subject *trçime kuu* (which is not an argument
 34997 of that clause) and followed by the main verb.

- 34998 (5) *trçime kuu [tç^{hi} a-tr-fse-a] tce mý-wy-mto-a kuu*
 34999 princess ERG what IRR-PFV-be.like-1SG LNK NEG-INV-see:FACT-1SG SFP
 35000 ‘What should I do (in order) not to be seen by the princess?’ (140505
 xiaohaitu-zh, 78)

35001 In (6), the clause *u-mṇaꝝ jyꝝ-z-nymbju* is inserted between the main verb *pjꝝ-mto*
 35002 and its transitive subject *rjylpu nuu kuu*. This transitive subject is coreferent with
 35003 the 3SG possessor of *u-mṇaꝝ*, object of the verb *jyꝝ-z-nymbju* ‘it dazzled it’ in the
 35004 embedded clause, and the presence of the ergative *kuu* shows that it receives its
 35005 case marking from the main verb rather than from the embedded subordinate
 35006 clause.

- 35007 (6) *tx-wi nuu kuu tx-ri nuu rjylpu*
 35008 INDEF.POSS-grandmother DEM ERG INDEF.POSS-thread DEM king
u-tc^habla sc^hiz pjꝝ-k-yz-nyndundo-ci
 35009 3SG.POSS-yard APPROX.LOC IFR.IPFV-PEG-PROG-take.here.and.there-PEG
tce, rjylpu nuu kuu [u-mṇaꝝ jyꝝ-z-nymbju] zo pjꝝ-mto tce,
 35010 LNK king DEM ERG 3SG.POSS-eye IFR-CAUS-be.bright EMPH IFR-see LNK
 35011 ‘The old woman was taking the (well-spun) thread_i here and there in the
 35012 yard of the king, and the king_j saw it_i as it_i dazzled his_j eyes (as it_i was so
 well spun that it was dazzling bright).’ (Norbzang 2012, 151-152)

35013 Unmarked embedding is also found in serial verb constructions. In (7), the
 35014 manner clause with *stu* ‘do like’ (§25.4.1.2) occurs between the instrument *u-jas*
 35015 *kuu* ‘with its paw’ and *lu-z-naꝝje* ‘it reaches into it’. The presence of the causative
 35016 prefix *z-* indicates that the instrumental phrase is selected by *lu-z-naꝝje* (§17.2.5.8),
 35017 not by *tu-ste*.

- 35018 (7) *tce u-jas kuu [ki tu-ste] lu-z-naꝝje*
 35019 LNK 3SG.POSS-hand ERG DEM:PROX IPFV-do.like[III] IPFV-reach.into[III]
nuu-ŋu
 35020 SENS-be
 ‘(The cat) reaches with its paw (into the whole) like this.’ (27-spjaNkW, 48)

35021 The examples (5), (6) and (7) above illustrate that unmarked embedded finite
 35022 clauses have a considerable variety of semantic functions, including purposive
 35023 clauses (§25.5.4), temporal clauses of simultaneity (§25.3.4.2) and manner clauses
 35024 (§25.4.1), respectively.

35025 25.1.5 Serial verb constructions

35026 In Japhug, as in Tshobdun (Sun 2012: 490–491), we find serial verb constructions
 35027 comprising two verbs sharing TAME category and subject (and often, but not in
 35028 all cases, objects).

35029 One of the verbs expresses the main action, and the other describes the man-
 35030 ner in which the action is performed (§25.4.1). Unlike Tshobdun, there is no con-
 35031 straint in Japhug against inserting a linker such as *tce* between the two verbs in
 35032 the serial construction, as shown by example (8).²

- 35033 (8) [ui-bar nuu ki tu-ste] tce
 3SG.POSS-wing DEM DEM.PROX IPFV-do.like[III] LNK
 35034 [tu-z-mbri] pnu-ηu
 IPFV-CAUS-make.noise SENS-be
 35035 ‘(The grasshopper) makes noise by (moving) its wings like this.’
 35036 (26-kWrNukWGndZWr, 78)

35037 In some cases, embedding of the first clause into the second one can occur
 35038 (§25.1.4), suggesting that a syntactic hierarchy exists between them.

35039 There are three main types of serial verb constructions in Japhug, involv-
 35040 ing deideophonic verbs (§25.4.1.1), simulative verbs (§25.4.1.1) and bipartite verbs
 35041 (treated in §11.6.3 in another chapter). Constructions that are superficially similar
 35042 to serial verb constructions but better analyzed as finite complement clauses are
 35043 discussed in §24.2.3.3.

35044 25.1.6 Coordination and parataxis

35045 When none of the four set of criteria described above (§25.1.2, §25.1.3, §25.1.4,
 35046 §25.1.5) are applicable, there remain a residue of clauses in parataxis or linked by
 35047 *tce* (§8.2.4.3) or *q^he*, without a clear subordinating hierarchy.

35048 In (9), all verbs are in the Imperfective, without correlative element (§25.1.2), fi-
 35049 nal copula (§25.1.3) or embedding (§25.1.4). The verbs *pjuu-sat* ‘it kills it’ and *ju-yut*

²This construction cannot be considered monoclausal, and thus differs from what is usually understood as ‘serial verb constructions’ in many languages (Aikhenvald 2006: 6), but I keep Sun’s terminology for want of a better term.

25 Other types of multicausal constructions

35050 ‘it brings it’ share the same subject and object, but unlike in serial constructions
35051 (§25.1.5) where both verbs express two aspects of the same action, *pjuu-sat* and
35052 *ju-yut* refer to two actions occurring one after the other.

35053 (9) *tce uu-pci ju-ce tce, ci ci pystcui pjuu-sat ju-yut,*
LNK 3SG.POSS-outside IPFV-go LNK one one bird IPFV-kill IPFV-bring
35054 *ci ci βzuu pjuu-sat ju-yut, ci ci qapi ra pjuu-sat tce*
one one mouse IPFV-kill IPFV-bring one one mole PL IPFV-kill LNK
35055 *ju-yut.*

IPFV-bring

35056 ‘(When her cubs are hungry, the cat mother) goes out and sometimes kills
35057 a bird and brings it, sometimes kills a mouse and brings it, sometimes
35058 kills a mole or something and brings it (to them).’ (21-IWLU, 37)

35059 Simple coordination and parataxis either express temporal subsequence (§25.3.3.1)
35060 as in (9) between the first clause and all the following ones, and between *pjuu-sat*
35061 and *ju-yut* in each of the three clauses, or disjunction (§25.6.4), as that between
35062 the three pairs of clauses in (9).

35063 Coordination with *tce* and *q^he* can in addition be used to indicate logical con-
35064 sequence (§25.5.1) and neutral addition (§25.6.2.1).

25.1.7 Tail-head linkage

35066 Tail-head linkage is a type of linking strategy whereby an element (generally
35067 the verb) of one clause is repeated in the following clause (see [de Vries 2005](#)
35068 for a typological overview). Such constructions are well-attested in languages of
35069 Western Sichuan (see for instance [Zhang 2013](#): 688–693). In Japhug, they occur
35070 predominantly with parataxis and loose temporal succession linking with finite
35071 clauses coordinated by linkers such as *tce* or *q^he*. It is a very common strategy both
35072 for ensuring narrative coherence, and providing time for the storyteller to pre-
35073 pare the narration of the following events without hesitating and using speech
35074 fillers (§10.3).

35075 Tail-head linkage can involve an entire sentence, as in (10), but often leaves
35076 out a constituent: for instance in (11) the intransitive subject *tr-pvtsu numu* is not
35077 repeated.

35078 (10) *[nuu-me stu kuu-xtci nuu ny-mbi-nuu], tce*
3PL.POSS-daughter most SBJ:PCP-be.small DEM IFR-give-PL LNK
35079 *[nuu-me stu kuu-xtci nuu ny-mbi-nuu tce], tce*
3PL.POSS-daughter most SBJ:PCP-be.small DEM IFR-give-PL LNK LNK

- 35080 *tc^heme nur to-numbrypui,*
 girl DEM IFR-ride
 35081 ‘They gave (him) their daughter (in marriage), and as they gave (him)
 35082 their daughter (in marriage), the girl mounted (a horse)’ (2002 qaCpa, 62)
- 35083 (11) *tcendyre [tx-pytso nunu li sungu zu jo-ce]. [sungru zu jo-ce] tce*
 DEM boy DEM again forest LOC IFR-go forest LOC IFR-go LNK
 35084 *tcendyre, p^habrgot nuu kuu tx-pytso nuu pa-mto tce*
 LNK boar DEM ERG boy DEM IFR:3→3'-see LNK
 35085 ‘The boy went again into the forest, and as he went into the forest, the
 35086 boar saw the boy.’ (140428 yonggan de xiaocafeng-zh, 232-233)

35087 In some cases, the verb form is slightly different in the repeated clause. For in-
 35088 stance in (12), the verb form in the first clause is in inverse configuration 3'→3PL
 35089 (the TAME is probably Inferential, though in this context the contrast between
 35090 Inferential and Aorist is neutralized, §14.3.2.7) while that in the second clause is
 35091 in direct configuration 3SG→3'.³

- 35092 (12) *sq^hi u-rkuu nutcu kó-wy-su-ymdzui-nuu. sq^hi u-rkuu*
 tripod 3SG.POSS-side DEM:LOC IFR-INV-CAUS-sit-PL tripod 3SG.POSS-side
 35093 *nutcu ka-su-ymdzui tce, (...) ra to-ti*
 DEM:LOC AOR:3→3'-CAUS-sit LNK PL IFR-say
 35094 ‘(The woman) had them sit by the hearth. She had them sit by the hearth,
 35095 and said (...).’ (160703 poucet3, 48-49)

35096 25.2 Conditional constructions

35097 Conditional constructions are biclausal, comprising a subordinate clause (the pro-
 35098 totasis) and a main clause (the apodosis). The apodosis describes a result which
 35099 takes place if the condition in the protasis is fulfilled. Depending on whether the
 35100 protasis is a fact or a hypothetical situation, several types of conditionals can
 35101 be distinguished: real, concessive, counterfactual and hypothetical. Some tempo-
 35102 ral clauses, such as iterative coincidence (§25.3.1), can also be considered to be a
 35103 subtype of conditionals, but are treated in §25.3.

³Aorist is used in the second clause of (12) to mark a point of temporal reference, §21.5.1.4, §25.3.4.1.

35104 25.2.1 Real conditionals

In real conditional constructions, the verb in the protasis has either initial reduplication (§12.4.1.2) or the Interrogative *u-* prefix (§21.7.4.2) and is followed by the additive postposition *nr* (§8.2.6), as shown by (13) and (15) on the one hand, and (16) on the other without semantic difference.

35109 Non-past TAME categories, in particular the Factual Non-Past (13) or the Sen-
35110 sensory (14) are used when the protasis concern a present state or an ongoing action
35111 whose truth value is known to the speaker, as in (13) and (14).

- 35112 (13) [pynmawombyr tu~tui-ŋu] ny, pu~ta-suixext nuu nui~ndum
ANTHR COND~2-be:FACT ADD AOR-1→2-teach DEM IMP-read
35113 ra
be.needed:FACT
35114 ‘If you (really) are Padma ’Od’bar, recite (the mantra) that I have taught
35115 you.’ (Norbzang 2005, 249)

- 35116 (14) [t_{urme} pu~pu~ma_k] ny, a-ku pu~sy^har-a ηu
 person COND~SENS-not.be ADD 1SG.POSS-head IPFV-shake-1SG be:FACT
 35117 tce tce, jy-p^hyo
 LNK LNK IMP-flee
 35118 'If (the thing in the tree) is not a man, I will shake my head, and you (had
 35119 better) flee.' (khu 2012, 50)

The Aorist in the protasis (§21.5.1) can express potential future events (15), but also generic conditions (17).

- 35122 (15) [tuarjuu laχtc^ha c^ho rŋul ra mur~mχ-jχ-tu-γut] nχ, nykinuu,
riches thing COMIT silver PL COND~NEG-AOR-2-bring ADD FILLER
35123 pjuu-ta-sat nχ
IPFV-1→2-kill be:FACT
35124 'If you do not bring goods and money, we will kill you.' (160706 poucet6,
35125 108)

The Inferential occurs in the two protases in (16) in a generic context to specifically express a condition which only becomes testable after a special procedure (removing bandages) has been applied, when the action or change of state in the protasis cannot be directly observed.

- 35130 (16) *kucnwa-rzab jamar tv-tsu tce tce pjau-rle tce tu-rtob tce,*
 seven-day about AOR-pass LNK LNK IPFV-untie[III] LNK IPFV-look LNK
 35131 *tce u-tó-pe ny tce nuu ma my-ra,*
 LNK QU-IFR-be.good ADD LNK DEM apart.from NEG-be.needed:FACT
 35132 *u-mú-to-pe ny tce li tu-xtcyr ny.*
 QU-NEG-IFR-be.good ADD LNK again IPFV-attach be:FACT
 35133 ‘After seven days, (the doctor) unties (the splint) and looks, if the (the
 35134 fracture) has healed, (the splint) is not needed anymore, if it has not
 35135 improved, (the doctor) attaches (the splint) again.’ (140426 laxthab, 11-13)

35136 Although the postposition coming after the verb in the protasis is almost al-
 35137 ways *ny* as in the examples above, this is not a requirement; for instance in (17)
 35138 the form *mu~my-nú-wy-su-q^hrut* ‘if one does not scrape it with it’ in the protasis
 35139 is rather followed by *q^he*.

- 35140 (17) *tce [tui-ndzruu kuu muu~my-nú-wy-su-q^hrut] q^he*
 LNK GENR.POSS-nail ERG COND~NEG-AOR-INV-CAUS-scrape LNK
 35141 *múj-ŋgra.*
 NEG:SENS-ACaus:cause.to.fall
 35142 ‘(Knits are firmly attached) and will not detach unless one scrapes them
 35143 with one’s nail.’ (21-mdzadi, 117)

35144 In reduplicated conditional forms, the negative prefix *mu-* has the special form
 35145 *mu~my-* (§13.1.1), while no such vowel alternation occurs with negative prefixes
 35146 in Interrogative forms (*u-mú-to-pe* in 16) or suppletive negative verbs (14).

35147 Apart from reduplicated conditional and Interrogative, a third way of marking
 35148 the protasis in a real conditional construction is the Irrealis (§21.4.1.5). While the
 35149 Irrealis usually marks counterfactuals (§25.2.4) conditionals, it also occurs in real
 35150 conditionals as in (18) and (19), in particular in the case of possible but not highly
 35151 frequent events. The Irrealis only very rarely follows by *ny*, and most commonly
 35152 occurs with the linker *tce*.

- 35153 (18) *a-nuu-nat-nuu tce tui-tc^ha ny tui-tc^ha nuu, nyki*
 IRR-PFV-be.tired-PL LNK one-pair LNK one-pair DEM electric.wire
 35154 *<dianxian> u-tak, q^he suaku u-tak nutcu tu-nuna-nuu tce*
 3SG.POSS-on LNK treetop 3SG.POSS-on DEM LOC IPFV-rest-PL LNK
 35155 ‘If/Whenever (the swallows) are tired (from flying), they rest in pairs on
 35156 electric wires or on trees.’ (03-mWrmWmbjW-zh, 54-55)

25 Other types of multiclausal constructions

- 35157 (19) *k^huna nu a-tv-ngo tce tcendre nu-snu ku-fse nu-ŋu*
dog DEM IRR-PFV-be.ill LNK LNK IPFV-be.mad SBJ:PCP-be SENS-be
35158 ‘If a dog gets ill (from rabbies), it will become like mad.’ (29-chWsYu, 3-4)

35159 25.2.2 Necessary condition

35160 Necessary condition (‘only if’) can be expressed using the postposition *kóbmuz*
35161 ‘only after’ (§8.2.11, §25.3.3.2) as connecting element between the two clauses.
35162 The protasis selects the Irrealis, the apodosis is in the Imperfective and the whole
35163 construction is under the scope of the modal verb *ra* ‘be needed’ as in (20) and
35164 (21).

- 35165 (20) *nui kysufse ku a-puu-ts^hi-nui tce nui kóbmuz ny*
DEM ALL ERG IRR-PFV:DOWN-drink-PL LNK DEM only.then ADD
35166 *kysufse c^hu-ts^hu-nui ra tce,*
all IPFV-be.fat-PL be.needed:FACT LNK
35167 ‘It is only if all (of the pigs) get to eat (hogwash) that they will all grow
35168 fat.’ (so that a person has to be appointed to prevent the pigs from
35169 fighting, otherwise the weaker pigs would get nothing to eat.)’ (160708
35170 paRtshi WkWrWru, 13)
- 35171 (21) *zraβ a-puu-tu kóbmuz ny ts^hynmu c^hu-rypu tce*
male.goat IRR-IPFV-exist only.then ADD ewe IPFV-bear.young LNK
35172 *tce nui nu-mp^hul ra.*
LNK DEM IPFV-reproduce be.needed:FACT
35173 ‘Ewe can bear young and reproduce only if a male goat is present.’
35174 (05-qaZo, 6)

35175 25.2.3 Concessive conditional

35176 There are three types of concessive conditional constructions: scalar (‘even if’),
35177 alternative (‘whether ... or’) and universal (‘whatever, whenever, wherever etc’)
35178 in Japhug. These conditional present two morphological commonalities concerning
35179 the verb in the protasis.

35180 First, in the majority of cases, this verb takes the Autive prefix *-nu-* §19.1.4,
35181 Jacques 2014a: 298–300), sometimes with emphatic gemination to *-nnu-*. Second,
35182 it never takes conditional initial reduplication (§12.4.1.2) or the Interrogative pre-
35183 fix (§21.7.4.2) unlike the verb in the protasis of real conditionals (§25.2.1).

35184 **25.2.3.1 Scalar concessive conditional**

35185 In scalar concessive conditionals, the protasis is followed by the scalar focus
 35186 marker *kuny* ‘also, even’ (§9.1.6.1), and contains a verb in the Past Imperfective
 35187 (22) or the Imperfective (23) with the autive prefix (§19.1.4).

- 35188 (22) *tx-mt^hum ndyre, [nu-kui-yrdi pui-nui-ŋu] kuny*
 INDEF.POSS-meat LNK AOR-SBJ:PCP-be.smelly PST.IPFV-AUTO-be also
 35189 *tu-ndze cti.*
 IPFV-eat[III] be.AFF:FACT
 35190 ‘Meat_i, (crows) eat it_i, even if it_i has become smelly.’ (22-qajdo, 21)
- 35191 (23) *[c^húu-wy-nui-βlu] kuny, tu-nuat eo ŋu ri,*
 IPFV-INV-burn also IPFV-be.ignited ADVERS be:FACT LNK
 35192 *uu-bryt nui jaŋ zo q^he, maka*
 3SG.POSS-charcoal DEM be:black:FACT EMPH LNK at.all
 35193 *nui-yx-mpje mx-c^ha.*
 IPFV-CAUS-be.warm[III] NEG-can:FACT
 35194 Even when one burns it, although it does ignite, its charcoal is black and
 35195 it does not warm anything. (17-thowum, 8-10)

35196 **25.2.3.2 Alternative concessive conditional**

35197 Alternative concessive conditional constructions express that the outcome in
 35198 apodosis will occur irrespective of a list of alternative possibilities, indicated by
 35199 several protases.

35200 In (24), each of the protases contains copula *pui-nui-ŋu* in Past Imperfective
 35201 (§21.5.3.1) Autive (§19.1.4) form, and share a single apodosis. In the clause *qajui*
 35202 *kui tu-ndze pui-nnu-ŋu*, this copula is combined with the Imperfective verb *tu-ndze*
 35203 ‘it eats it’ to build a Periphrastic Past Imperfective construction (§21.5.3.5).

- 35204 (24) *[tuu-cya pui-kui-ngruu pui-nnu-ŋu],*
 INDEF.POSS-tooth IPFV-SBJ:PCP-ACAUS:break PST.IPFV-AUTO-be
 35205 *[pui-kui-yytsur pui-nnu-ŋu] q^he, [qajui kui tu-ndze*
 AOR-SBJ:PCP-crack PST.IPFV-AUTO-be LNK bug ERG IPFV-eat[III]
 35206 *pui-nnu-ŋu], nufse tu-kui-myym pui-nnu-ŋu], numuu*
 PST.IPFV-AUTO-be like.that IPFV-SBJ:PCP-hurt PST.IPFV-AUTO-be DEM
 35207 *kui wuma zo nuismyn.*
 ERG very EMPH heal:FACT
 35208 ‘Whether one’s tooth is broken, cracked, whether one has a decayed

25 Other types of multicausal constructions

35209 tooth or whether it simply hurts, he (a particular dentist) treats it very
 35210 well.' (27-tApGi, 142-145)

35211 The presence of a periphrastic TAME category with a copula is not required.
 35212 In (25), the protases contain an Aorist Autive verb form *ky-nuu-rŋgu-nuu*.

35213 (25) [stymku kuu-fse *ky-nuu-rŋgu-nuu*], [suku *uu-pa*
 pasture SBJ:PCP-be.like AOR-AUTO-lie.down-PL tree.top 3SG.POSS-under
 35214 *ky-nuu-rŋgu-nuu*], [prax-pa *ky-nuu-rŋgu-nuu*],
 AOR-AUTO-lie.down-PL cliff-under SBJ:PCP-be.like
 35215 *uu-nuu* *nuu-ŋga uu-taŋ* *pjuu-ta-nuu*.
 AOR-AUTO-lie.down-PL DEM 3PL.POSS-clothes 3SG.POSS-on IPFV-put-PL
 35216 'Whether (travelers) sleep on pastures, under trees or in caves, they put it
 35217 on their blankets.' (30-mboR, 38-39)

35218 The alternative is often between the affirmative and negative versions of the
 35219 same event (polar alternative concession), a meaning close to that of the scalar
 35220 concessive conditional. In such cases, the conditional constructions has two pro-
 35221 tases, the first in affirmative form, and the second with the corresponding nega-
 35222 tive form as in (26). The same apodoses can be repeated after each protasis.

35223 (26) [tui-sum *pui-a<nuu>ri*] *ny ju-kuu-ce*,
 GENR.POSS-mind PST.IPFV-<AUTO>go[II] LNK IPFV-GENR:S/O-go,
 35224 [*muu-pui-a<nuu>ri*] *ny ju-kuu-ce* *pui-ra*
 NEG-PST.IPFV-<AUTO>go[II] LNK IPFV-GENR:S/O-go PST.IPFV-be.needed
 35225 'One had to go whether one liked it or not.' (14-siblings, 215)

35226 The alternative concessive conditional is one of the few constructions where
 35227 even transitive verbs such as *nyla* 'agree' occur in the Past Imperfective (§21.5.3.1).⁴

35228 (27) [*pa-n-nyla*] *ce-a*, [*muu-pa-n-nyla*]
 PST.IPFV:3→3-AUTO-agree LNK IPFV:go-1SG
 35229 *ny* *ce-a ra*
 NEG-PST.IPFV:3→-AUTO-agree LNK IPFV:go-1SG be.needed:FACT
 35230 'I will go whether he agrees or not.' (elicited)

⁴The verb *nyla* 'agree' selects the UPWARDS orientation, as shown by the form *to-nyla* 'he agreed' in example (169), §16.2.1.7.

35231 A more concise type of alternative concessive construction shown in (28) avoids
 35232 repeating the content of the protasis and of the apodosis, and marks the alterna-
 35233 tive by combining the affirmative (*pui-nui-ŋu*) and negative (*pui-nui-maŋ*) copulas
 35234 after the verb in the protasis.

- 35235 (28) [ta-nyla pui-nui-ŋu pui-nui-maŋ] ce-a
 AOR:3→3-agree PST.IPFV-AUTO-be PST.IPFV-AUTO-not.be IPFV;go-1SG
 35236 *ra*
 be.needed:FACT
 35237 ‘I will go whether he agrees or not.’ (elicited)

35238 Another way to indicate alternative concession is the interrogative particle *ci*
 35239 (§10.4.2) as in (29).

- 35240 (29) [nuiŋa ŋu] *ci*, [mbro ŋu] *ma*, *pjui-nvndry*
 cow be:FACT SFP horse be:FACT LNK IPFV-be.poisoned
 35241 *nui-ŋgryl*
 SENS-be.usually.the.case
 35242 ‘Whether it is a cow or a horse, they get poisoned.’ (25-qarmWrwa, 21)

35243 In addition to these constructions, polar alternative concession ‘whether or
 35244 not’ can be expressed by a construction combining a negative existential verb
 35245 with biclausal complements, comprising the same verb in bare root form followed
 35246 by the bare root prefixed with the negative prefix *m-*, as in (30). This unusual
 35247 construction is discussed in more detail in §16.2.2.2.

- 35248 (30) [[ce] [m-ce] *tui-me*] *ma kx-nyma tui-cʰa*
 BARE.INF:go NEG-BARE.INF:go 2-not.exist:FACT LNK INF-work 2-can:FACT
 35249 *me qʰe naχtcury cti*
 not.exist:FACT LNK be.the.same:FACT be:FACT
 35250 ‘(It does not matter) whether you go or not, you are not able to do
 35251 anything, it amounts to the same.’ (elicited)

35252 25.2.3.3 Universal concessive conditional

35253 Universal concessive conditional constructions comprise a protasis with an in-
 35254 terrogative pronoun (in free-choice indefinite function, §6.6.6, §23.7) and a main
 35255 verb in the Aorist or Past Imperfective. In addition, the autive (§19.1.4) occurs
 35256 either in the protasis, with emphatic reduplication as (31) or (33) or in the main
 35257 clause as in (32). The emphatic marker *zo* (§26.1.1.5) often follows the subordinate
 35258 clause.

25 Other types of multiclausal constructions

- 35259 (31) *kumcku nuu tce, uu-duxyun wuma zo muum tce, [...]*
 garlic DEM LNK 3SG.POSS-fragrance really EMPH be.tasty:FACT LNK
 35260 *[tc^hi <cai> tý-wy-nuu-βzui-βzu] zo pjuu-tu ra.*
 what dish AOR-INV-AUTO-EMPH~make EMPH IPFV-exist be.needed:FACT
 35261 ‘Garlic has a nice smell, (...), whatever dish one prepares, there has to be
 35262 (garlic in it).’ (07-kWmCku, 26)
- 35263 (32) *tc^homba tce [t^hyjtcu uu-βjiz ty-ye] q^he ju-nnui-yi*
 cold LNK when 3SG.POSS-wish AOR-come[II] LNK IPFV-AUTO-come
 35264 *cti ma*
 be.AFF:FACT LNK
 35265 ‘A cold (the disease) comes whenever it wants (it occurs spontaneously).’
 35266 (22-tAmbrWm, 7)
- 35267 (33) *[tc^hi puu-nui-fsy~fse] zo ny-rca*
 what PST.IPFV-AUTO-EMPH~be.like EMPH 2SG.POSS-together
 35268 *tu-kui-tsum-a ra*
 IPFV-2→1-take.away-1SG be.needed:FACT
 35269 ‘In any case (whatever (the circumstances) are like), take me with you.’
 35270 (07-deluge, 59)
- 35271 Examples of universal concessive conditionals without autive prefix are however
 35272 also attested, as in (34).
- 35273 (34) *[nyotcu nuu-łuu~łoy] zo wuma zo sydwy*
 where AOR-EMPH~come.out EMPH really EMPH be.annoying:FACT
 35274 ‘No matter where it grows, it is very annoying.’ (5-khArWm, 19)
- 35275 Universal concessive conditionals are semantically close to correlative relative
 35276 clauses with free-choice interrogative pronouns (§23.2.5) such as (35).
- 35277 (35) *kuaz tce [azo tc^hi tur~ty-stu-t-a] nuu ty-ste*
 INTERJ LNK 1SG what TOTAL~AOR-do.like-PST:TR-1SG DEM IMP-do.like[III]
 35278 *je*
 SFP
 35279 ‘Come one, do everything in the same way as me.’ (In whatever way I act,
 35280 act in this way) (140511 xinbada-zh, 252)
- 35281 First, the verb *tuu~ty-stu-t-a* totalitative initial reduplication (§23.3.2), a speci-
 35282 ficity of relative clauses.

Second, the interrogative pronoun *tçhi* has a different syntactic function in these constructions. In the correlative relative (35), *tçhi* is the relativized element, and serves as direct object of both the verb in the subordinate clause and that in the main clause.⁵ In the universal concessive conditionals (31) and (33), *tçhi* in the subordinate clauses has no syntactic role in the main clause.

25.2.4 Counterfactuals

In counterfactual constructions, the protasis describes a condition that is known to be false, and the apodosis indicates an outcome that would have occurred if the condition had been true. In Japhug, counterfactual conditionals have strict requirements on TAME marking in both the protasis and the apodosis. The verb in the protasis is in the Irrealis (§21.4.1.5), and the Past Imperfective is required in the apodosis even for transitive dynamic verbs (§21.5.3.4), as illustrated by (36) and (37).⁶

- (36) [azo nyzo kui icq^ha nutcu yu-tu-kui-qur-a
 1SG 2SG ERG just.before DEM:LOC CISL-IPFV-2→1-help-1SG
 a-pu-ŋu] tce, numu wuma zo
 IRR-PST.IPFV-be LNK DEM really EMPH
pua-nr-pe-t-a ma
 PST.IPFV-TROP-be.good-PST:TR-1SG LNK
 ‘If you had come and helped me just right before, I would have
 appreciated it.’ (140427 liangge shibiang he qiangdao-zh, 24-25)
- (37) t^ham tce nyki χawo [azo a-mi a-pu-tu] tce, nuu rjxlp
 now LNK FILLER if.only 1SG 1SG.POSS-leg IRR-IPFV-exist LNK DEM king
 u-tuu nuu ui-rkuu nutcu kui-ryzi nuu azo
 3SG.POSS-son DEM 3SG.POSS-side DEM:LOC SBJ:PCP-stay DEM 1SG
a-pu-ŋu-a pua-ra
 IRR-IPFV-be-1SG PST.IPFV-be-needed
 ‘Now, if only I had legs, the one staying next to the prince would have
 had to be me.’ (said by the little mermaid, who has no legs) (150819
 haidenver-zh, 149)

⁵See §14.4.2 for an account of the argument structure of the simulative verb *stu* ‘do like’.

⁶In a previous publication (Jacques 2014a: 301), I claimed that there were counterfactual constructions with a verb in the Factual Non-Past in the apodosis (example 99), but this was an erroneous interpretation.

35307 25.3 Temporal clauses

35308 25.3.1 Iterative coincidence

35309 Iterative coincidence is a biclausal construction comprising a temporal subordinate clause (*A*) and a main clause (*B*), expressing that each time the event in
 35310 *A* takes place, that in *B* necessarily follows, and that this has taken place several times in the past. It can be generally translated as ‘each time *A* then *B*’. As
 35311 shown by (38) and (39), the temporal clause generally takes a verb in the Aorist
 35312 with initial reduplication (§12.4.1.3) like the protasis of a conditional construction
 35313 (§12.4.1.2, §25.2.1), followed by the emphatic marker *zo* (§26.1.1.5).

- 35316 (38) [turme ra ju~jy-ye-nui] zo tu-nurmyzu pjy-ηu tce
 people PL ITER~AOR-come[II]-PL EMPH IPFV-show.off IFR.IPFV-be LNK
 35317 ‘Each time people came, he would show off.’ (2011-10-qajdo, 2)

- 35318 (39) tui-mui kui~ka-lyt zo zdumla~ruui~ruu ju-nui-łob
 sky ITER~AOR-release EMPH snail IPFV-AUTO-come.out
 35319 ηu
 be:FACT
 35320 ‘Each time it rains, snails come out.’ (elicited)

35321 Alternatively, unreduplicated Aorist in its function to mark a temporal reference point (§21.5.1.4, §25.3.4.1) can be interpretable as iterative coincidence when
 35322 the verb in the main clause is in the Imperfective, as in (40).
 35323

- 35324 (40) tce [ly-zo-nui] q^he tuturca lu-zo-nui,
 LNK AOR:UPSTREAM-land-PL LNK together IPFV:UPSTREAM-land-PL
 35325 [t^hui-nuiqambumbjom-nui] q^he tuturca c^hui-nuiqambumbjom-nui,
 AOR:DOWNSTREAM-fly-PL LNK together IPFV:DOWNSTREAM-fly-PL
 35326 ‘When they land they all land together, when they fly they all fly
 35327 together.’ (23-scuz, 79-80)

35328 25.3.2 Precedence

35329 Three types of constructions are used to express temporal precedence between
 35330 the event described in the main clause precedes that of the temporal subordinate
 35331 clause: neutral precedence, immediate precedence and terminative.

35332 These temporal clauses normally occur before the main clause, hence resulting
 35333 in a non-iconic temporal relationship between the two clauses, since the first
 35334 (subordinate) clause describes an event occurring *after* that in the second one
 35335 (the main clause).

35336 25.3.2.1 Neutral precedence

35337 There is only one available construction in Japhug to express that the action of
 35338 the main occurs before that of the temporal clause without further aspectual
 35339 specifications: clauses with the postposition *cunγgu* ‘before’ (§8.2.11). The verb in
 35340 *cunγgu* clauses is required to be in the Imperfective (§21.2.3). In (41) for instance,
 35341 replacing the Imperfective form *nui-si* by the corresponding Aorist (*nui-si*), an
 35342 infinitive (*kv-si* or any other finite or non-finite form would result in a utterly
 35343 agrammatical sentence.

- 35344 (41) [nui-si] cunγgu pui-nui-NCyt-ndzi
 35345 IPFV-die before AOR-AUTO-ACAUS:separate-DU
 ‘They had divorced before she died.’ (14-siblings, 331)

35346 A syntactic error involving a verb in a temporal clause in *cunγgu* ‘before’ is
 35347 presented in §24.7.

35348 25.3.2.2 Immediate precedence

35349 Immediate precedence can be expressed by three constructions.

35350 First, a clause in the Factual Non-Past (§21.3.1) with linker *trkʰa* ‘about to’ can
 35351 describe a action that took place just before that of the main clause, as in (§42)
 35352 and (§43).

- 35353 (42) tamu kui [yi-ndzi] trkʰa tce purwua u-cki uzo kui
 35354 ANTHR ERG come:FACT-DU about.to LNK donkey 3SG-DAT 3SG ERG
 ta-tut nura ci to-suŋjɪt
 AOR:3→3-say[II] DEM IFR-remember LNK
 35355 ‘Lhamo remembered (the word that) she had said to her donkey as they
 35356 were about to depart (to come here).’ (2002 qajdoskAt, 64-5)

- 35357 (43) [amboŋ] trkʰa tce tce nui-mu-a tce, tce a-jav
 35358 burst:FACT about.to LNK LNK SENS-be.afraid-1SG LNK LNK 1SG.POSS-hand
 jui-muŋmu jui-cti qʰe
 35359 IPFV-move SENS-be:AFF LNK
 35360 ‘(When I was aiming), as (the gun) was about to burst, I was afraid and
 my hand moved.’ (28-CAmWGdW, 134-135)

35361 Alternatively, the *ju-* Proximative prefix (§21.6.2) and the Periphrastic Proxi-
 35362 mative (§21.6.2.1) can be used to express this meaning, as illustrated by (44) and
 35363 (45).

- 35364 (44) [cyr jut-jy-azyut] tce (...) ur-kyrme nuu pjy-cuu-nqob
 night PROX-AOR-arrive LNK 3SG.POSS-hair DEM IFR-CAUS-hang
 35365 'Just before the night fell, (the witch) hung her hair (on the window on
 35366 the tower).' (140506 woju guniang-zh, 145)
- 35367 (45) tuurmuu ko-yi tce zatsa qanuu pjy-ηu
 evening IFR-come LNK soon be.dark:FACT IPFV.IFR-be
 35368 'The evening came and it was about to be dark (it was getting dark).'
 35369 (140510 fengwang-zh, 55)

35370 25.3.2.3 Terminative

35371 The terminative postposition *myctṣa* 'until' (§8.2.9) occurs with finite clauses to
 35372 express the end point of the event described in the main clause. In terminative
 35373 clauses, verbs nearly always take a negative prefix as in (46) and (47), and the
 35374 polarity contrast is neutralized.

- 35375 (46) nuu-ky-k^ho nuu [muu-t^ha-ckut] myctṣa tu-ndze
 AOR-OBJ:PCP-give DEM NEG-AOR:3→3'-eat.completely until IPFV-eat[III]
 35376 *nuu-cti*.
 SENS-be.AFF
 35377 '(The monkey cannot control its urge to eat), and eats (the things that
 35378 people) have given him until none is left (until he has completely finished
 35379 eating it).' (19-GzW,
- 35380 (47) [“jy-ce jy” muu-ty-tut-a] myctṣa ma-nuu-tur-munmu
 IMP-go be.allowed:FACT NEG-AOR-say[II]-1SG until NEG-IMP-2-move
 35381 *ra*
 be.needed:FACT
 35382 'Don't move until I tell (you) that you can go.' (qala 2002, 58)

35383 Non-negative terminative clauses are rare but attested, as in (48), especially
 35384 when the main clause is in negative form itself.

- 35385 (48) [zimk^hym zo tu-ndza-nuu] myctṣa ky-mqlas mūj-βze.
 long.time EMPH IPFV-chew-PL until INF-swallow NEG:SENS-make[III]
 35386 '(The animals) do not swallow until they have chewed it for along time.'
 35387 (19-qachGa mWntoR, 204)

35388 **25.3.3 Subsequence**

35389 Temporal succession can be expressed by simple coordination, the order of the
 35390 clauses mirroring the temporal sequence of the events they describe (§25.1.6).
 35391 The present section however focuses on subordinating construction devoted to
 35392 encoding temporal subsequence between the subordinate clause and the main
 35393 clause.

35394 **25.3.3.1 Neutral subsequence**

35395 The most common way to specify temporal succession between two clauses is to
 35396 use the locative/temporal relator noun *wu-qʰu* ‘after, behind’ (§8.3.4.2). The tem-
 35397 poral clauses are in finite form, in particular in the Aorist as in (49) and (50).

- 35398 (49) [*<weixiao> kuβde-xpa puw-stʰut-a*] *wu-qʰu tce tcendyre*,
 nursing.school four-year AOR-finish-1SG 3SG.POSS-after LNK LNK
 35399 *<fenpeigongzuo> tce սdtarjxt lý-wy-lat-a-nu*
 assign.work LNK TOPO AOR:UPSTREAM-INV-release-1SG-PL
 35400 ‘After I finished the four years of nursing school, they assigned me a
 35401 work position and sent me to Gdongbryad.’ (140501 tshering skyid, 118)

35402 The relator noun *wu-qʰu* can be optionally followed by the linker *tce*, by locative
 35403 postpositions such as *ri* (§8.2.4.1) and can even be modified by the adverb *tsa* ‘a
 35404 little’ as in (50).

- 35405 (50) [*smuntsuy nunu t̪y-łob*] *wu-qʰu tsa ri tce tce*,
 Pleiades DEM AOR-come.out 3SG.POSS-after a.little LOC LNK LNK
 35406 *qandze tu-łob ηu*.
 earthworm IPFV-come.out be:FACT
 35407 ‘The (constellation of the) earthworm appears a little after the Pleiades
 35408 have come out.’ (29-mWBZi, 26)

35409 Alternatively, and more rarely, the relator *wu-mpʰru* ‘after, following’ (§8.3.5)
 35410 can be used to indicate temporal subsequence, as in (51).

- 35411 (51) [*tua-mu ka-lxt*] *wu-mpʰru nu tu*.
 INDEF.POSS-sky AOR:3→3'-release 3SG.POSS-after DEM exist:FACT
 35412 ‘It is found after it has rained.’ (23-mbrAZim, 57)

35413 25.3.3.2 Immediate subsequence

35414 Temporal clauses with the immediate converb (§16.6.3) describe an event imme-
 35415 diately followed by the action referred to in the main clause (52).

- 35416 (52) *tce [nuu tu-tuu-łob]* *zo q^he c^huu-p^hut-nuu*
 LNK DEM IPFV-IMM:CONV-come.out EMPH LNK IPFV-take.out-PL
 35417 *c^huu-βde-nuu cti.*
 IPFV-throw-PL be.AFF:FACT

35418 ‘As soon as it comes out (in fields), (the farmers) pluck it off and throw it
 35419 away.’ (16-CWrNgo, 35)

35420 The main clause can also contain a stative verb, depicting a temporary state
 35421 beginning just after the event of the converbial clause (53).

- 35422 (53) *tce [tu-tuu-łob]* *tce rq^hyrq^hyt* *zo*
 LNK IPFV-IMM:CONV-come.out LNK IDPH(II):fresh.and.firm EMPH
 35423 *nuu-pa*
 SENS-AUX
 35424 ‘When (this mushroom) has just come out, it is nice and firm.’
 35425 (24-zwArqhAjmAG, 15)

35426 Another way to express immediate subsequence is a temporal clause with the
 35427 temporal postposition *cimuma* ‘immediately after’ (§8.2.11) taking a clause with a
 35428 verb in the Aorist. This construction is semantically very close to the immediate
 35429 converb, but more commonly found when the main verb is a stative verb like
 35430 *arvurvu* ‘be wrinkled’ in (54).

- 35431 (54) *nuu ty-łob* *cimuma* *tce nuu-yrvurvu*
 DEM AOR-come.out immediately.after LNK SENS-be.wrinkled
 35432 ‘When (the stalk of the fern) has just come out, it is all wrinkled.’
 35433 (13-NanWkWmtsWG, 13)

35434 The postposition *kóymuz* ‘only after’ (§8.2.11), which imposes no requirement
 35435 on the TAME category of the verb in the subordinate clause, indicates that the
 35436 event in the subordinate clause is a prerequisite for that in the main clause to
 35437 occur, as shown by (55).

- 35438 (55) [u-mi ra ku-xtcyr-nuu] kóbmaz tv-lu pjuu-tcxt-nuu
 LNK IPFV-tie.up-PL 3SG.POSS-foot PL IPFV-attach-PL only.after
 35439 puu-ra
 INDEF.POSS-milk IPFV-take.out-PL SENS-be.needed
 35440 'People need to attach the legs (of the female hybrid yak) before milking.'
 35441 (They milk it only after they have attached its legs). (05-qambrW, 19)

35442 25.3.3.3 Ingressive

35443 The ingressive postpositions *canpci* ‘since’, ‘from ... on’ and *pcintcrt* ‘since’ (§8.2.11)
 35444 can take clauses with a verb in the Aorist, indicating the beginning of a period
 35445 lasting up until to the current point of temporal reference (utterance time, or a
 35446 reference point in the past in the case of narratives). The main clause is generally
 35447 in negative form, as in (56) and (57).

- 35448 (56) [ny-wa nuu kui-fse jy-ari] canpci nuu tce
 2SG.POSS-father DEM SBJ:PCP-be.like AOR-go[II] since DEM LNK
 35449 muu-jy-a<nuu>zyuit cti tce
 NEG-AOR-<VERT>arrive be.AFF:FACT LNK
 35450 'Ever since your father went (to the mission) like that, he has not come
 35451 back.' (Norbzang 2005, 206)

- 35452 (57) [ci nura ly-azyut-nuu] canpci nuu tce, tc^heeme nuu
 INDEF DEM:PL AOR:UPSTREAM-arrive-PL since DEM LNK girl DEM
 35453 tuu-yjyn ci kuni nyre ky-mts^hym pui-me
 one-time INDEF also AOR-laugh OBJ:PCP-hear PST.IPFV-not.exist
 35454 'Even since the other ones had come back (to the king's palace), the girl
 35455 (that they had brought with them) had not been heard laughing even
 35456 once.' (qachGa 2003, 321)

35457 25.3.4 Concurrence

35458 25.3.4.1 Temporal reference point

35459 Aside from indicating the temporal relation and ordering between the events in
 35460 the subordinate and the main clauses, temporal clauses can also serve to specify
 35461 a temporal reference point for the main clause. There are four constructions of
 35462 this type.

35463 First, one of the functions of the Aorist is precisely to fix a temporal reference,
 35464 for both past and future events (§21.5.1.4).

Second, prenominal clauses with temporal relator nouns in 3SG possessive form such as *w-syi* ‘the day when...’, *w-xpa* ‘the year when...’ , *w-ray* ‘the time when...’ or other ones as in (58) can mark the time period when the action in the main clause takes place. These clauses can be formally as a subtype of finite prenominal relative clauses (§23.5.9).

- (58) [puw-numdar-ndzi] *w-ymur* *nwtcu tce mts^hu nur*
 AOR-jump-DU 3SG.POSS-evening DEM:LOC LOC lake DEM
 c^humc^hum zo, tce, tu-skym pjy-syza
 IDPH(II):slowly EMPH LNK INF:II-dry.up IFR:DOWN-start
 ‘In the evening when they jumped (into the lake), the level of the lake started to go down slowly and the lake disappeared’ (2003, Nyimawozer 2, 105)

Third, the locative postpositions *ri*, *t_qu* and *z_{uu}* (§8.2.4.1) can also occur with finite clauses, with a temporal meaning even without temporal relator noun as in (59).

- (59) *ununutcu bo* [tu_zo puw-kui-xtci] *ri*
 DEM:LOC ADVERS:TOP GENR PST.IPFV-GENR:S/O-be.small LOC
 rcanu, mtc^hi kui-wxtuu~wxti zo puw-tu.
 UNEXP:FOC sea.buckthorn SBJ:PCP-EMPH~be.big EMPH PST.IPFV-exist
 ‘There, when we were young, there was a huge sea buckthorn.’ (140522 Kamnyu zgo, 344)

Fourth, the temporal postposition *j_{vz}* ‘when’ and its variant *j_{vznv}* (§8.2.11) can take finite clauses as in (60).

- (60) *ma [izora puw-xtci-j]* *j_{vz} tu-ndza-j*
 LNK 1PL PST.IPFV-be.small-1PL when IPFV-eat-1PL
 mua-puw-ηgryl ma
 NEG-PST.IPFV-be.usually.the.case LNK
 ‘When we were little, we did not eat it.’ (13-NanWkWmtsWG, 177)

25.3.4.2 Simultaneity

There are two types of subordinate clauses expressing an ongoing action or event taking place at the same time as that of the main verb without serving as a point of temporal reference, unlike the constructions discussed in §25.3.4.1 above.

35491 First, finite clauses with the relator nouns *w-k^huk^ha* ‘while’ and *w-juja* ‘along
 35492 with’, ‘while’ describe events that occur together with, and serve as background
 35493 to the action of the main clause, as in (61) and (62). There are no coreference
 35494 restrictions on the arguments of the subordinate and the main clauses.

- 35495 (61) *tcendyre [tu-nusmyr] w-k^huk^ha tu-ryma-nur*
 LNK IPFV-treat 3SG-the.same.time IPFV-work-PL
 35496 (The lepers)_i worked (there) while (the doctor) was treating them_i.
 35497 (25-khArWm, 68)
- 35498 (62) *[numu ju-rfuy] w-k^huk^ha w-se ku-ts^{hi}*
 DEM IPFV-run 3SG-the.same.time 3SG.POSS-blood IPFV-drink
 35499 *nur-cti.*
 SENS-be:AFF
 35500 ‘(The lion) drinks (its prey’s)_i blood while it_i is (still) running.’ (20-sWNgi,
 35501 53)

35502 The relator *w-juja* ‘along with’ differs from *w-k^huk^ha* in that it implies a sim-
 35503 taneous gradual change of degree in both the event or state of the subordinate
 35504 clause and that of the main clause. The verb of the subordinate clause is gene-
 35505 rally in the Perfective (though a few Imperfective forms are also attested), while
 35506 that of the main clause can be in any TAM form, in particular with incremental
 35507 initial reduplication (§12.4.1.4) indicating gradual increase as in (63).

- 35508 (63) *[uzo tx-wxti] w-juja tce w-jwas numu*
 3SG AOR-be.big 3SG.POSS-along LNK 3SG.POSS-leaf DEM
 35509 *nur~jiu-nduβ zo nur-nyu.*
 INCR~IPFV-be.tiny EMPH SENS-be
 35510 ‘As it grows big, its leaves become more and more tiny.’ (09-mi, 18)

35511 The clause in *w-juja*, rather than a gradual change of state across time, can
 35512 indicate change across space, as in (64), where *tx-mbro* does not mean that the
 35513 mountain becomes higher, but rather that the person observing the plants moves
 35514 higher in the mountain.

- 35515 (64) *zgoku tx-mbro w-juja nuu zm̩bri tu-tuu-ldzuz*
 mountain AOR-be.high 3SG.POSS-along DEM willow INCR~IPFV-be.flexible
 35516 *zo nyu*
 EMPH be:FACT
 35517 ‘As (ones goes) higher in the mountain, the more the (wood) of the
 35518 willows is flexible.’ (07-Zmbri, 43)

25 Other types of multicausal constructions

Second, gerundive clauses (§16.6.1.3) are an alternative possibility to indicate a background event or state occurring concurrently with the event of the main clause, as in (65), though in some cases gerunds rather express manner rather than temporal overlap (§25.4).

- (65) *nunuu nuu-nuy-me ruutci, nuu kuan̄y ku-χse nuu-ra.*
DEM IPFV-APPL-fear[III] LNK DEM also IPFV-feed[III] SENS-be.needed
tce [syz-nuy-mur~ymu] zo ku-χse nuu-ra.
LNK GER-APPL-fear EMPH IPFV-feed[III] SENS-be.needed
'Even though it_i is afraid of it_j, it_i has to feed it_i, and it_i has to feed it_i
while being afraid of it_i' (24-ZmbrWpGa, 110)

25.3.4.3 Opportunity

The postposition *baz* 'while ... still' (and its variant *bazny*; its etymology is discussed in §5.8.3) has a meaning close to that of Chinese 趁着 <chènzhe> 'while ... still', 'taking the opportunity of...'. It requires a finite clause as in (66) and (67).

- (66) *icqʰa tuu-ndzi nuu nyki, [yurri] bazny*
the.aforementioned INDEF.POSS-skin DEM FILLER be.wet:FACT while
nunuu nunuatcu pjui-tṣuiβ-nuu tce tce
DEM DEM:LOC IPFV-sew-PL LNK LNK
'They would sew the skin while it was still wet.' (06-BGa, 53)

The transitive verb *naχtʰyβ* 'take the opportunity of' can select as object a finite clause or a participial clause with a similar meaning: in (67), both constructions redundantly occur.

- (67) *nuuzora tce ki nuu-nuuzuiβ bazny, [kuu-nuuzuiβ] nuu*
2PL LNK DEM.PROX SENS-sleep while SBJ:PCP-sleep DEM
ky-naχtʰyβ-nuu tce, jy-pʰyo-nuu!
IMP-take.the.opportunity-PL LNK IMP-flee-PL
'Flee while this one (the ogre) is sleeping.' (160706 poucet6, 83-84)

25.4 Manner clauses

25.4.1 Serial verb construction

The main function of serial verb constructions (§25.1.5) in Japhug is to express manner. The most grammaticalized serial constructions involve deideophonic and simulative verbs.

35545 Serial verbs constructions can themselves occur as complements of a single
 35546 complement-taking verb, resulting in a multiclausal complement (§24.2.4).

35547 25.4.1.1 Deideophonic verbs

35548 Deideophonic verbs (§20.9) commonly occur in serial verb constructions. The
 35549 transitive deideophonic verb *nudruuβ* ‘gore again and again’ for instance, is only
 35550 attested in serial construction with *tçʰuu* ‘gore’ as in (68). The ideophonic verb can
 35551 either follow (68) or precede the main verb (69), the latter construction being by
 35552 far more common.

- 35553 (68) *icqʰa srūnmui nuu to-tçʰuu to-nudruuβ tce*
 the.aforementioned râkshasî DEM IFR-gore IFR-repeatedly.gore LNK

35554 *pjy-sat*
 IFR-kill

35555 ‘(The rhinoceros) gored the râkshasî repeatedly and killed her.’
 35556 (28-smAnmi, 403)

- 35557 (69) *srūnmui nuu to-nudruuβ zo to-tçʰuu*
 râkshasî DEM IFR-repeatedly.gore EMPH IFR-gore

35558 ‘(The rhinoceros) gored the râkshasî repeatedly and killed her.’ (elicited
 35559 on the basis of 68)

35560 25.4.1.2 Similative verbs

35561 The similative verbs *stu* ‘do like’ and *fse* ‘be like’⁷ commonly occur in a serial
 35562 verb construction to indicate the way in which the action takes place. They are
 35563 always the first verb of the series.

35564 The ditransitive verb *stu* (§14.4.2) is found with transitive verbs, and shares its
 35565 subject and object with them, as shown by (70) (generic transitive subject) and
 35566 (71) (3PL→1SG).

- 35567 (70) *[u-ru nuu ki tú-wy-stu] [pjúr-wy-qlut]*
 3SG.POSS-stalk DEM DEM:PROX IPFV-INV-do.like IPFV-INV-break
 35568 ‘One breaks its stalk like this.’ (14-tasa, 81)

35569 In addition, in some cases it takes the orientation of the other verb (EASTWARDS
 35570 in 71), rather than its intrinsic orientation (UPWARDS as in 70).

⁷I adopt the term ‘similative verb’ (Creissels 2017b) rather than ‘manner deixis verbs’ that I used in previous publications, since these verbs do not express deixis on their own, and require a demonstrative.

- 35571 (71) [azo kuaki ntsui kú-wy-stu-a-nui] tce,
 1SG DEM:PROX always IPFV-INV-do.like-1SG-PL LNK
 35572 [kú-wy-znuak^brum-a-nui]
 IPFV-INV-punish-1SG-PL
 35573 ‘They tortured me like this.’ (Gesar, 278)

35574 The demonstratives *ki* and *kuki* in (70) and (71) are semi-objects that are not
 35575 shared with the other verb.

35576 With intransitive verbs, *fse* ‘be like’ is used instead of *stu*. It shares its intran-
 35577 sitive subject with the other verb, as shown by (72) where both *fse-a* and *ndzur-a*
 35578 have 1SG indexation.

- 35579 (72) azo nuu sŋicyr zo kutcu [ki fse-a]
 1SG DEM night.and.day EMPH here DEM:PROX be.like:FACT-1SG
 35580 [ndzur-a] ntsui nuu-ra tce
 stand:FACT-1SG always SENS-be.needed like
 35581 ‘I have to stand like this night and day.’ (The divination, 2002, 44)

35582 There are cases when *fse* rather than *stu* occurs with transitive verbs, and which
 35583 could superficially appear to be cases of serial verb constructions with transitiv-
 35584 ity mismatch. In (73) the transitive verb *nuc^bymda* ‘drink with a straw’ is preceded
 35585 by *fse*, with 1PL coreference between the object of the former and the intransitive
 35586 subject of the latter.

- 35587 (73) t^buu-rgyz-i, sna nuu-me-j tce [ki t^b-fse-j]
 AOR-be.old-1PL be.good AOR-not.exist-1PL LNK DEM.PROX AOR-be.like-1SG
 35588 tce [c^bú-wy-nuc^bymda-j] cti
 LNK IPFV:DOWNTSTREAM-INV-drink.with.a.straw-1SG be.AFF:FACT
 35589 ‘Now that we have become old and useless, we became like this, they
 35590 drink our (blood) with straws (planted in our back).’ (Norbzang 2005, 78)

- 35591 However, note that although *t^b-fse-j* and *c^bú-wy-nuc^bymda-j* share one argu-
 35592 ment, their TAME category is different, and the two clauses constitute a simple
 35593 case of coordination rather than a serial verb construction: *ki t^b-fse-j* means ‘we
 35594 became like this’ rather than ‘(they treated) us like this’. The corresponding gen-
 35595 uine serial verb construction is shown by (74), where *nuc^bymda* occurs with *stu*
 35596 as expected, and the two verbs have the same person-number configuration and
 35597 TAME category (like 71 and 70 above).

- 35598 (74) *t^hur-tur-rgyz tce [ki tú-wy-stu]*
 AOR-2-be.old LNK DEM.PROX 2-INV-do.like:FACT
 35599 *[tú-wy-nuic^hymda] cti tce,*
 2-INV-drink.with.a.straw:FACT be.AFF:FACT LNK
 35600 ‘When you have become old, they will drink you (your blood) like this
 35601 with a straw (planted on your back)’ (Norbzang 2012, 67)

35602 Some non-deideophonic verbs expressing manner such as *nvxçyt* ‘do with
 35603 force’ (like its Tshobdun cognate *nveset* ‘exert oneself’, Sun 2012: 490–491) can
 35604 also be used in a serial verb construction.

35605 25.4.1.3 Other verbs of manner

35606 Other verbs of manner can also occur in a serial construction, for instance the
 35607 distributed action verb *amuzyut* ‘be evenly distributed’ (examples 177 and 178,
 35608 §18.7) or atelic motion verbs like *ŋke* ‘walk’ (19, §15.1.2.1) or *nuqambumbjom* ‘fly’
 35609 (example 63, §19.4).

35610 25.4.1.4 Simultaneous action

35611 Serial verb constructions can be used to describe a secondary action simultaneous
 35612 with the main action, optionally marked with the emphatic *zo* (§26.1.1.5) as
 35613 *pjv-sjur* ‘it was snoring’ in (75).

- 35614 (75) *pjv-sjur zo pjv-nuzuiβ cti ma, maka zo*
 IFR,IPFV-snore EMPH IPFV,IFR-sleep be.AFF:FACT LNK at.all EMPH
 35615 *mui-pjv-suχsyl.*
 NEG-IFR-realize
 35616 ‘The aquatic monster was sleeping with a snore, and did not realize
 35617 anything.’ (140508 benling gaoqiang de si xiongdi-zh, 190)

35618 25.4.1.5 Degree

35619 Serial constructions can also describe the degree, intensity or extent of an action
 35620 (§26.1.3), even for non-gradable predicates. In these constructions, the verb
 35621 describing the main action or state is in the first position, and a stative verb of
 35622 degree (such as *arço* ‘be finished’, *tç^hom* ‘be too much’ or *rtaç* ‘be enough’) occurs
 35623 in second position, as in (76).

25 Other types of multiclausal constructions

- 35624 (76) *wuma zo kur-tso nura nu-si-nur nu-arco-nur*
 really EMPH SBJ:PCP-understand DEM:PL AOR-die-PL AOR-be.finished-PL
 35625 *cti*
 be.AFF:FACT
 35626 ‘The (elders) who knew (traditional stories) really well have all died.’
 35627 (conversation, 2016-03-20)

35628 25.4.2 Manner conversbs

35629 Infinitive converbial clauses (§16.2.1.7) can indicate the manner of the action of
 35630 the main clause, or a background event. The converb can be optionally followed
 35631 by the ergative *kuu* and/or the emphatic *zo* (§26.1.1.5), as in (77) and (78).

- 35632 (77) *[kx-rfuy] (kuu) (zo) jo-ce*
 INF-run ERG EMPH IFR-go
 35633 ‘He went running.’ (elicited)
- 35634 (78) *tce kuicunguu ji-si nura [kx-fkur]*
 LNK in.former.times 1PL.POSS-wood DEM:PL INF-carry.on.the.back
 35635 *bjia kuu jú-wy-sur-yzyuit-nur puu-ra.*
 completely ERG IPFV-INV-CAUS-reach-PL PST.IPFV-be.needed
 35636 ‘In former times, one used to transport firewood exclusively by carrying
 35637 it on the back.’ (140430 tWfkur, 21)

35638 The converb is often in negative form, meaning ‘without ...ing’ as in (79) and
 35639 (80).

- 35640 (79) *[ui-yi ra nuu-my-kx-suuz] nuu rŋul nuu jx-mbi.*
 3SG.POSS-relative PL 3PL.POSS-NEG-INF-know DEM silver DEM IFR-give
 35641 ‘She_i gave him money without her_i relatives knowing (about it).’
 35642 (28-qAjdoskAt, 170)
- 35643 (80) *tŋ-mu nuu kuu rcanuu, maka zo my-kx-ruisuso kuu*
 INDEF.POSS-mother DEM ERG UNEXP:FOC at.all EMPH NEG-INF-think ERG
 35644 *to-nyla*
 IFR-agree
 35645 ‘The woman accepted without thinking at all.’ (150907 yingning-zh, 122)

35646 The manner infinitive clauses can express the degree of the state or action in
 35647 the main clause, as in (81) and (82).

- 35648 (81) [tui-mpas ky-cuu my-ky-sy-c^ha] zo mnyym
 GENR.POSS-eye INF-open NEG-INF-PROP-can EMPH hurt:FACT
 35649 ‘(This disease) hurts so much that one cannot open one’s eyes.’
 35650 (25-kACAl, 34)

- 35651 (82) βzui nuu kuu [tc^hi ky-c^ha] zo to-nuardo^h ny to-nuardo^h
 mouse DEM ERG what INF-can EMPH IFR-collect ADD IFR-collect
 35652 ‘The mouse collected as much (fruits) as it could.’ (IWlu 2002, 32)

35653 The stative/impersonal infinitives in *kuu*- are also used as conversbs for some
 35654 anticausative verbs, modal auxiliary and existential verbs (§16.2.1.7) as in (83),
 35655 and some have become lexicalized as adverbs (§16.2.1.8).

- 35656 (83) nuu [tui-jas ky-lyt my-kuu-ra]
 DEM GENR.POSS-had INF-release NEG-INF:STAT-be.needed
 35657 tui-ci kuu c^hui-sui-mtcur
 INDEF.POSS-water ERG IPFV:DOWNSTREAM-CAUS-turn
 35658 puu-ŋgryl
 PST.IPFV-be.usually.the.case
 ‘The water would make the (toy waterwheel) turn without any need to
 35659 use one’s hand.’ (08-kWmtChW, 23)

35661 In addition, gerundive clauses (§16.6.1.3), which are used to describe actions
 35662 that are simultaneous with that of the main clause (§25.3.4.2), occur in clauses
 35663 that express manner more than temporal overlap, as in (§84).

- 35664 (84) [kutcu sy-mtsua~mtsuar] ku-ryzit-a tce, jisŋi nd^h
 DEM.PROX:LOC GER-be.hungry IPFV-stay-1SG LNK today ADVERS
 35665 tumuakumpci kuu púa-wy-nuu-mbi-a cti
 heaven ERG AOR:DOWN-INV-AUTO-give-1SG be.AFF:FACT
 35666 ‘I am staying here in hunger, but today heavens have sent down to me
 35667 (these humans to eat).’ (Norbzang 2012, 291)

35668 25.5 Causality

35669 25.5.1 Consequence

35670 The only specific marker of consequence is the linker *núndza* ‘for this reason’
 35671 (85).

- 35672 (85) *wu-mtuu γyzu tce, tce nündza qapyymtumtu*
 3SG.POSS-crest exist:SENS LNK LNK for.this.reason hoopoe
 35673 *tu-ti-nuu jnu-ηu*
 IPFV-say-PL SENS-be
 35674 ‘It has a crest, and for this reason it is called ‘hoopoe’.’
 35675 (23-qapGAmWmtW, 20)

This linker results from the fusion (§5.1.1.5) of the noun *wu-ndza* ‘reason’ used in causal clauses (§25.5.2) with the distal demonstrative *nuu* in anaphoric function ‘the reason of (the preceding sentence)’ (§6.9.1).⁸

However, consequence is more generally simply indicated by the linkers *tce* and/or *q^he* (§25.1.6), as illustrated by (86).

- 35681 (86) *tc^hemr-pui pui-cti-a q^he tγ-tcuu ra nuu-cki*
 girl-DIM PST.IPFV-be-1SG LNK INDEF.POSS-SON PL 3PL.POSS-DAT
 35682 *ku-ryzi-a müij-naz-a q^he kγ-zyy-cuu-fka*
 IPFV-stay-1SG NEG:SENS-dare-1SG LNK INF-REFL-CAUS-be.full
 35683 *mua-puu-naz-a*
 NEG-PST.IPFV-dare-1SG
 35684 ‘Since I was a little girl, I did not dare to stay at a boy’s place, and thus did
 35685 not dare to eat to my full.’ (17-lhazgron, 45-46)

25.5.2 Cause

The causal linker *matci* ‘because’ is the main way to indicate cause in Japhug. In this construction, it is not clear which clause is the main clause, since the linker can be prosodically linked to both the preceding, or the following one, even with a pause after *matci* as in (87). The clause preceding *matci* expresses the result/consequence (consequence clause), and the one following it the cause (causal clause).

- 35693 (87) *ma nuunu k^hro mγ-sy-mto. matci jnu-xtci.*
 LNK DEM much NEG-PROP-see:FACT because SENS-be.small
 35694 ‘That (species of ant) is barely visible. Because it is (so) small.’

Example (88) cannot be analyzed as an attestation of a preposed *matci* causal clause, since the clause that follows *q^he wu-yli dyan* is a redundant consequence

⁸The phrase *nuunu wu-ndza* without vowel fusion is also found in exactly the same context in the same text.

35697 clause (§25.5.1), repeating the real consequence clause *paʂ yuu u-yl̥i dʂn*, which is
 35698 located in the expected place before the linker *matći*.

- 35699 (88) *paʂ yuu u-yl̥i dʂn [matći my-ndze zo*
 35700 *me] qʰe u-yl̥i dʂn*
 35701 not.exist:FACT LNK 3SG.POSS-manure be.many:FACT
 35702 ‘Pigs have a lot of manure because they eat anything, and so they have a
 lot of manure.’ 05-paR, 106-107)

35703 The shorter form *ma*⁹ can also mark cause as in (89). However, *ma* has many ad-
 35704 ditional functions, including marking precautioning (§25.5.6), adversative (§25.6.1)
 35705 and exceptive (§25.6.3) clauses.

- 35706 (89) *u-jwaʂ nu (...) tu-ostyko zo my-cʰa ma mpuu.*
 35707 3SG.POSS-leaf DEM IPFV-be.straight EMPH NEG-can LNK be.soft:FACT
 35708 ‘Its leaves do not grow straight (they hang down), as they are soft.’
 (07-kWmCku, 12)

35709 Alternatively, the relator noun *u-ndʐa* ‘reason’ (§8.3.6.2, §24.6.3.5) with erga-
 35710 tive (and/or locative) postpositions can serve to build causal clauses, as in (90).
 35711 In some rare cases, *u-ndʐa*-clauses can have a purposive meaning (example 214,
 35712 §24.6.3.5).

- 35713 (90) *[“nyzo u-ruuz yʐu” tʂ-tut-a*
 35714 2SG 3SG.POSS-supernatural.power exist:SENS AOR-say[II]-1SG
u-ndʐa] zuu kuu a-pa a-ma ni
 35715 3SG.POSS-reason LOC ERG 1SG.POSS-father.HON 1SG.POSS-mother.HON DU
kuu “mtsʰukʰa u-ŋgu tce (...) tyrca pu-ce ma
 35716 ERG lake 3SG.POSS-in LOC together IMP:DOWN-go apart.from
my-jʂy
 35717 NEG-be.allowed:FACT
 35718 ‘Because I said that you had supernatural powers (§24.2.5.2), my parents
 (said) ‘go together with him into the lake.’(Nyima wodzer 2003.2, 70-73)

35719 Instead of being marked with the ergative, the causal clauses can also serve
 35720 as predicate of a copular construction (example 175, §21.5.1.4). Predicative causal
 35721 clauses occur often standalone as in (91), without any overt clause expressing the
 35722 result.

⁹The two forms are historically related: *matći* is probably a combination of *ma* with the additive topic marker *tɕi* (§9.1.6.2).

25 Other types of multicausal constructions

- 35723 (91) [“*nua ma-t̪-tu-ste, nua ma-t̪-tu-fse*” *tu-tu-ti-nua*] *ndza*
 DEM NEG-IMP-2-do.like[III] DEM NEG-IMP-2-be.like IPFV-2-say-PL reason
 35724 *ŋu wo*
 be:FACT SFP
 35725 ‘(If your son wants so much to see his grandparents), this is because you
 35726 (his parents always) tell him ‘Don’t act like that, don’t be like that.’
 35727 (unlike grandparents, who are more lenient)’ (conversation 16-08-11)

Apart from *ndza*, the relator nouns *u-t̪urzi* ‘mercy’ and *u-xçyt* ‘strength’ can also be used to indicate cause on both noun phrases (§8.3.6.2) and subordinate clauses.

The noun *u-t̪urzi* ‘mercy’ is specifically used to indicate beneficial actions thanks to which a desirable result is obtained (92).

- 35733 (92) [<*guojia*> *kui ta-nusmyñ*] *u-t̪urzi tce tce (...)* *tham tce*
 country ERG AOR:3→3'-heal 3SG.POSS-mercy LNK LNK now LNK
 35734 *wuma zo t̪y-pe-nua*.
 really EMPH AOR-be.good-PL
 35735 ‘Thanks to the fact that (our) country(’s governement) has healed them,
 35736 (...) now they are much better.’ (140522 RdWrJAt, 139)

The locution *X u-xçyt kui Y* with the ergative specifically means ‘do *X* so much/to the extent that *Y*’, as in (93), specifying not only that *X* is the cause of *Y*, but in addition that *X* was performed to/with a sufficiently high degree/frequency/ to make the action/situation *Y* possible.¹⁰ More data on degree causal constructions is provided in §26.1.2.2.

- 35742 (93) *ts̪upa ci pjy-tu tce tcendyre, [kʰu kui t̪y-wy-ndza-nua]*
 village INDEF IFR.IPFV-exist LNK LNK tiger ERG AOR-INV-eat-PL
 35743 *u-xçyt kui t̪y-mu kxtsa ci*
 3SG.POSS-strength ERG INDEF.POSS-mother COLL:family INDEF
 35744 *pjy-ri-ndzi tce*
 IFR.IPFV-remain-DU LNK
 35745 ‘There was a village, but a tiger had eaten them (the villagers) to the
 35746 extent that only a mother and her daughter remained.’ (khu 2012, 2)

¹⁰The locution *X u-xçyt kui* is reminds of French à force de *X*.

35747 **25.5.3 Prerequisite**

35748 Prerequisite constructions do not express the direct cause of the action/situation
 35749 in the main clause, but simply the basic conditions for that action or situation to
 35750 be possible, like 既然 <jírán> ‘since’ in Chinese. This meaning is expressed by
 35751 a clause in the Aorist as in (94), formally similar to a temporal clause (§21.5.1.4,
 35752 §25.3.4.1).

- 35753 (94) <*huangdi*> (...) tú-wy-sui-ndo-a t_y-c^ha t_y-ηu tce (...)
 emperor IPFV-INV-CAUS-take-1SG AOR-can AOR-be LNK
 35754 <*jiaohuang*> nui zgruyi tú-wy-sui-ndo-a c^ha tce,
 pope DEM certainly IPFV-INV-CAUS-take-1SG can:FACT LNK
 35755 c-ty-ti ra
 TRAL-IMP-go be.needed:FACT
 35756 ‘Since (the golden fish) has succeed in making me emperor, he will
 35757 certainly succeed in making me pope, go and tell him that.’ (140430 yufu
 35758 he tade qizi-zh, 204)

35759 The minimal clause *nui t_y-ηu tce* can have a prerequisite interpretation ‘given
 35760 these circumstances, in this case’ as in (95).

- 35761 (95) nui t_y-ηu tce tce, si lú-wy-yxjui, smi a-ty-wxti tce
 DEM AOR-be LNK LNK wood IPFV-INV-add fire IRR-PFV-be.big LNK
 35762 *nui-p^hyn*
 SENS-be.efficient
 35763 ‘In this case, if one adds more wood, and increase the fire, it will work.’
 35764 (150827 taisui-zh, 63)

35765 **25.5.4 Purposive clauses**

35766 Five main constructions are available in Japhug to express purpose.¹¹

35767 First, the purposive converb (§16.6.2) is a non-finite verb form dedicated to
 35768 expressing the purpose of the action in the main clause. It is built by combining
 35769 the prefix *s_y(z)-* with a B-type preverb (§15.1.1.1), the reduplicated verb stem and
 35770 a possessive prefix coreferent with one of the core arguments of the purposive
 35771 clause (and almost always in negative form). Purposive converbs are productive:
 35772 even denominal verbs of Tibetan origin such as *nut_chomba* ‘catch a cold’ (96) can

¹¹This section does not include the participial clauses (§16.1.1.6) used as supine purposive clauses of motion verbs (§24.4.2.1).

25 Other types of multicausal constructions

35773 derive this type of converbs. However, they are barely attested in the Japhug
 35774 corpus, and simpler constructions are preferred to express purpose.

- 35775 (96) *a-tcuu* *wi-my-tu-syz-nutc^hombur~mba tui-ŋga*
 1SG.POSS-son 3SG.POSS-NEG-IPFV-PURP:CONV INDEF.POSS-clothes
 35776 *kui-jas* *tr-z-ŋga-t-a*
 SBJ:PCP-be.thick AOR-CAUS-wear-PST:TR-1SG
 35777 ‘In order to prevent my son from catching a cold, I made him wear thick
 35778 clothes.’ (elicited)

35779 Second, the the verb *numga* ‘want from’ can be combined with an infinitival
 35780 clause to express purpose, as in (97) to express the aim of the action in the main
 35781 clause.

- 35782 (97) *tce [kupycz nua muu-ŋuu-ky-βzu ky-numga], izyra,*
 LNK type.of.bug DEM NEG-IPFV-INF-grow INF-want.from 1PL
 35783 *ji-mthum nura <binggui> tu-χtui-j tce nua wi-ŋguu ri*
 1PL.POSS-meat DEM:PL refrigerator IPFV-buy-1PL LNK DEM 3SG.POSS-in LOC
 35784 *pjuu-nuu-rku-j eti ma*
 IPFV-auto-put.in-1PL be.AFF:FACT LNK
 35785 ‘In order to prevent *kupycz* bugs from growing (in the meat), we buy
 35786 refrigerators and put our meat in it.’ (28-kWpAz, 46)

35787 The verb *numga* in this function is generally a velar infinitive *ky-numga* in
 35788 conversial function (§16.2.1.7) as in (97) and (98a), but a finite verb is also possible
 35789 (98b). The infinitival clause can be focalized, serving as the predicate of a copular
 35790 construction in *ŋu* (98c).

- 35791 (98) a. *kuruu-skṛt ky-βzjoz ky-numga kui, mbark^hom myctṣa*
 Gyalrong-language INF-learn IN-want.from ERG TOPO until
 35792 *jy-ye-a ŋu.*
 AOR-come[II]-1SG be:FACT
 b. *kuruu-skṛt ky-βzjoz ky-numga-t-a tce,*
 Gyalrong-language INF-learn AOR-want.from-PST:TR-1SG LNK
 35794 *mbark^hom myctṣa jy-ye-a ŋu.*
 TOPO until AOR-come[II]-1SG be:FACT
 35795 ‘I came all the way up to Mbarkham to learn the Gyalrong language.’
 35796 (elicited)

- 35797 c. *mbark^hom ju-yi-a nui, kuruu-skxt ky-βzjoz*
 TOPO IPFV-come-1SG DEM Gyalrong-language INF-learn
 35798 *ky-nuimga ηu*
 INF-want.from be:FACT
 35799 ‘(The reason why) I come to Mbarkham is to learn the Gyalrong
 35800 language.’ (elicited)

35801 Third, the relator noun *w-spa* ‘its material’ (§16.1.3.10, §23.2.4) can take object
 35802 (99) and subject (100) participial clauses with a purposive meaning. These con-
 35803 structions are to be analyzed as essive participial clauses (§24.4.2.2).

- 35804 (99) *turme ra kui w-<shipin> jo-lyt-nui tce [nunui*
 people PL ERG 3SG.POSS-video IFR-release-PL LNK DEM
 35805 *w-ky-nympo]* *w-spa* *jo-lyt-nui* *juw-ηu.*
 3SG.POSS-OBJ:PCP-watch 3SG.POSS-material IFR-release-PL SENS-be
 35806 ‘People send him this video for him to watch it.’ (conversation 2019-02-26)
- 35807 (100) *[kuruu-skxt w-kui-βzjoz] w-spa, mbark^hom*
 Gyalrong-language 3SG.POSS-SBJ:PCP-learn 3SG.POSS-material TOPO
 35808 *myctsa jy-ye-a ηu.*
 until AOR-come[II]-1SG be:FACT
 35809 ‘I came all the way up to Mbarkham to learn the Gyalrong language.’
 35810 (elicited)

35811 Essive participial clauses without *w-spa* can also have a purposive meaning, as
 35812 in (101).

- 35813 (101) *kui-yyrbaš ra kui tu-ndo-nui. [nui-kui-qur] tu-ndo-nui*
 SBJ:PCP-hunt PL ERG IPFV-take-PL 3pl.POSS-SBJ:PCP-help IPFV-take-PL
 35814 *pjy-ηgryl.*
 IPFV.IFR-be.usually.the.case
 35815 ‘(In former times), hunters would take (dogs to hunt). They would take
 35816 dogs to help them (as their helpers).’ (05-khWna, 39-40)

35817 Fourth, a biclausal construction comprising a clause containing a simulative
 35818 verb (*fse* ‘be like’ or *stu* ‘do like’) in finite form with the interrogative pronoun
 35819 (§6.5.1), and another finite clause Y linked by *tce*, specifically means ‘what should
 35820 X do in order to Y’ as in (102a) and (102b).

- 35821 (102) a. *izora yuu tc^{hi} tu-fse-j tce ji-tuu-ci*
 1PL GEN what IPFV-be.like-1PL LNK 1PL.POSS-INDEF.POSS-water
 35822 *y_Yzu (...) tu-tui-t^he uu-túu-c^ha*
 exist:SENS IPFV-2-ask[III] QU-2-can:FACT
 35823 ‘Can you ask for us what we (need to) do in order to have water?’
 35824 (said by villagers living in a desert where there is no water,
 35825 divination 2005, 14)
- 35826 b. *nunura kuu tchi a-ty-stu-nuu tce*
 DEM ERG what IRR-PFV-do.like-PL LNK
 35827 *nui-tuu-ci y_Yzu?*
 3PL.POSS-INDEF.POSS-water exist:SENS
 35828 ‘What should they do in order to have water?’ (divination 2005, 38)

35829 The clause in *fse* can be embedded within the clause *Y*, as shown by example
 35830 (5) (§25.1.4).

35831 Fifth, purposive meaning can be expressed by a clause in the Irrealis (§21.4.1
 35832 with the adverb *t_{cet}t^ha* ‘later’ as in (103). This type of construction resembles pre-
 35833 cautioning clauses (§25.5.6), but with opposite polarity.

- 35834 (103) *lu-zyuut c_ungua tce nu_ceu ku-y_Yrat-a t_{cet}t^ha*
 IPFV:UPSTREAM-arrive before LNK DEM:LOC IPFV-throw-1SG later
 35835 *a-my-ly-zyuut*
 IRR-NEG-PFV:UPSTREAM-arrive
 35836 ‘Before it arrives, I will throw (the enchanted white stone), so that it
 35837 does not arrive.’ (25-kAmYW-XpAltCin, 62)

35838 Finally, clauses with the relator *u-ndz̥a* ‘reason’ can also have a purposive in-
 35839 terpretation (example 214, §24.6.3.5, which resembles causal clauses §25.5.2).

35840 25.5.5 Justification clauses

35841 Justification clauses (Lopes 2009) differ from strictly clausal clauses in that there
 35842 is no direct causal relationship between the main clause and the justification
 35843 clause. Rather, the truth value of the latter allows to make an inference concerning
 35844 the truth value of the latter.

35845 In Japhug, there is no dedicated construction to express such meaning, and as
 35846 in many languages, the clausal linkers *ma* and *mat_çi* (§25.5.2) can be used (104).

- 35847 (104) *c^ha tci ko-ts^{hi} matci lo-βzi cti ri*
alcohol also IFR-drink LNK IFR-be.drunk be.AFF:FACT LNK
35848 ‘He had also drunk alcohol, since he was drunk.’ (140506 loBzi, 13)

35849 The justification meaning is clearest when the verb of the main clause takes the
35850 Probabilitative *umy-* (§21.7.2.1) or the Rhetorical Interrogative *wβry-* (§21.7.3.3)
35851 prefixes with peg circumfix, and that in the clause following *ma* is in the Sensory,
35852 as in (105) and (106).

- 35853 (105) *cxoco pynmawombyr jo-nuu-yi umy-kui-ŋu-ci ma, k^ha*
these.days ANTHR IFR-VERT-come PROB-PEG-be-PEG LNK house
35854 *nuu-yyk^huu-nuu*
SENS-have.smoke-PL
35855 ‘Maybe Padma ’Od’bar came back the last few days, since there is smoke
35856 coming out from their house.’ (Norbzang 2012, 226-227)
- 35857 (106) *juufciuçyr wβry-puu-tuu-nuužuβ-ci ma n^x-mraꝝ nuu-yurni*
last.night RH.Q-PST.IPFV-2-sleep-PEG LNK 2SG.POSS-eye SENS-be.red
35858 ‘It seems that you did not sleep (well) last night, since your eyes are red.’
35859 (elicited)

35860 The use of *ma* as a sentence final particle with the modal tenses (§10.4.4) pos-
35861 sibly originate from constructions as in (105) and (106) with elided justification
35862 clauses.

35863 25.5.6 Precautioning clauses

35864 Precautioning constructions comprise a clause describing an undesirable result,
35865 and another clause referring to a measure that can be taken to prevent this result.
35866 The precautioning meaning can be expressed with a negative purposive clause
35867 (§25.5.4); in particular, purposive conversbs, which are almost always in negative
35868 forms (§16.6.2), could be described as a type of precautioning clauses.

35869 However, the most common way of expressing precautioning meaning in Ja-
35870 phug is by coordinating a clause in the Irrealis (§21.4.1), the Imperative (§21.4.2)
35871 or the Prohibitive (§21.4.3) indicating the preventive measure, with a clause in
35872 the Factual Non-Past (§21.3.1) referring to the undesired event. The two clauses
35873 are coordinated by the linker *ma* (107) and/or the adverb *t^ha* ‘later’ or *t^het^ha*, as
35874 illustrated by (108) and (109), a crosslinguistically common strategy to express
35875 precautioning meaning (Angelo & Schultze-Berndt 2016).

- 35876 (107) *ma-jv-tur-ce ma tur-ndzəp*
 NEG-IMP-2-go LNK 2-ACAU:cause.to.roll.down:FACT
 35877 ‘Don’t go (to the temple on the mountain to do circumambulations), you
 35878 might fall down.’ (conversation, conversation 15-12-05)
- 35879 (108) *nua k^hramba ma-tv-βze-a ra ma tce*
 DEM lie NEG-IMP-make[III]-1SG be.needed:FACT LNK LNK
 35880 *<lishijizai> pjui-tui-βze cti tcet^ha, numua rcanu*
 history record IPFV-2-make[III] be:AFF:FACT LNK later
 35881 *<zuzubeibei> kui yui-nymqe-a-nua.*
 generations ERG INV-scold:FACT-1SG-PL
 35882 ‘I cannot tell lies, as you are making a historical record, and previous
 35883 and future generations would scold me.’ (27-kikakCi, 224)
- 35884 (109) *a-my-t^hui-sta ma tcet^ha ju-nur-ce cti*
 IRR-NEG-PFV-wake LNK later IPFV-VERT-go be.AFF:FACT
 35885 ‘May she not wake up (Don’t wake her up), otherwise she will go away.’
 35886 (150818 muzhi guniang-zh, 106)

35887 There is no categorical requirement for the first clause to contain a modal
 35888 TAME category. In (110), we find instead the negative form *my-pe* ‘it is not good’
 35889 with a non-finite clause that can either be interpreted as a stative infinitive (‘it is
 35890 not good (if) they are thin’) or a subject participle (‘the thin ones are not good’).

- 35891 (110) *robre nua kuniy [wuma zo kui-xts^hum] my-pe ma*
 fence.rail DEM also really EMPH INF:STAT-be.thin NEG-be.good LNK
 35892 *tce pjui-qluat-nua.*
 LNK IPFV-break-PL
 35893 ‘As for fence rails also, it is not good (if they are) too thin, otherwise (the
 35894 hybrid yaks in the cowshed) will break them.’ (150902 mkhoN, 42)

35895 25.6 Other constructions

35896 25.6.1 Adversative

35897 25.6.1.1 Concession

35898 The most common way of expressing concession is the linker *tçeri* ‘but, however’,
 35899 which can occur in sentence-initial position, after a pause as in (111).

- 35900 (111) *w-βri nuara qapri w-βri wuma zo nu-fse,*
 3SG.POSS-body DEM:PL snake 3SG.POSS-body really EMPH SENS-be.like
 35901 *w-rme ri kui-tu maye. tceri w-mylyjab*
 3SG.POSS-hair also SBJ:PCP-exist not.exist:SENS LNK 3SG.POSS-limb
 35902 *yzyu.*
 exist:SENS
 35903 ‘(The gecko’s) body looks a little bit like the body of a snake, and it has
 35904 also no hair. However, it has limbs.’ (28-tshAwAre, 10)

35905 The shorter variant *ri*¹² is also used to indicate concession (112) when used be-
 35906 between coordinated clauses. When *ri* follows noun phrases or complement clauses,
 35907 it is a different marker, either that of additive focus ‘also’ as in (111) above (§9.1.6.2,
 35908 §25.6.2) or a locative postposition (§8.2.4.1).

- 35909 (112) *kuwu nuu izo kutcu ji-zimkʰym tce tu*
 bearded.vulture DEM 1SG DEM.PROX:LOC 1PL.POSS-region LOC exist:FACT
 35910 *ri my-dvn*
 LNK NEG-be.many:FACT
 35911 ‘Bearded vultures are found here in our region, but not many.’
 35912 (2011-08-kuwu, 28)

35913 The linker *ma* also has a concessive meaning in some contexts, as in (113).
 35914 This function possibly derives from its use as an exceptive postposition mean-
 35915 ing ‘apart from’ (§8.2.8, §25.6.3).

- 35916 (113) *qalias nuu to-z-nuymaz ma ky-sat nuu mui-pjy-cʰa*
 eagle DEM IFR-CAUS-have.a.wound LNK INF-kill DEM NEG-IFR-can
 35917 ‘He wounded the eagle, but could not kill it.’ (150902 hailibu-zh, 21)

35918 The topic marker *ndyre* (§9.1.5.3) can also indicate adversative meaning, with
 35919 scope over one constituent of the sentence, in (114) over an infinitival clause.

- 35920 (114) *pas kui tci ndze, nuŋa kui tci ndze. tce [turme*
 pig ERG too eat[III]:FACT cow ERG too eat[III]:FACT LNK people
 35921 *ky-ndza] ndyre my-sna.*
 INF-eat CONTRAST:FOC NEG-be.good:FACT
 35922 ‘Pigs eat it, cows eat it, but it is not good for people to eat.’ (17-ndZWnW,
 35923 125-126)

¹²The form *tceri* is a combination of the linker *tce* with *ri*; the concessive meaning of *ri* itself possibly derives from its function as a locative postposition, used with a finite clause as a temporal subordinator as in (59) (§25.3.4.1).

In the register of traditional stories, the locution *jinbala zuu* is also employed to mark adversative clauses as in (115). The linker *jinbala* is borrowed from Tibetan རිං-පා-ලා *jin.pa.la*, a non-finite form of the copula རිං *jin* ‘be’ which also has adversative meaning in the classical language.

- (115) *tce rjylpu nuu nuu-rga jinbala zuu “e, a-tcuu ki styþts^hyt ci muu-cui-c^ha kuu” nx-suiso tce*
 LNK king DEM AOR-be.happy although LOC INTERJ 1SG.POSS-son
 DEM.PROX contest INDEF NEG-APPREHENSIVE-can SFP IFR-think LNK
 ‘Although the king was happy (about that), he thought ‘I am worried
 that my son will not succeed in the contest.’ (2003 sras, 84)

Finally, velar infinitive converbs (§16.2.1.7) with the ergative can have an adversative interpretation, as in (116), where the converbial clause is better translated by ‘although ...’ than ‘without...’.¹³

- (116) “*jx-yi*” *kunx mx-kx-ti kuu, “nx-rzaþ yuu-ku-þze-a”*
 IMP-come also NEG-INF-say ERG 2SG.POSS-wife CISL-IPFV-make[III]-1SG
to-ti, rjylpu nuu u-cki.
 IFR-say king DEM 3SG.POSS-DAT
 ‘Although (the king had not) said ‘come’ (Without (the king) saying
 ‘come’), she told the king ‘I am coming to become your wife.’ (140511
 yinzi-zh, 21)

25.6.1.2 Rectification

The negative copula *maþ* ‘not be’ followed by the ergative *kuu* negates the first clause (*A*), and indicates that the events described by following clause(s) *B* instead are true. The meaning of this construction can be glossed ‘not *A*, but rather *B*’ as in (117).

- (117) *kuajka nuunu sungu c^hiz c-ku-ryloþ jnu-maþ*
 chough DEM forest APPROX:LOC TRAL-IPFV-make.nest SENS-not.be
kuu, (...) kuxtco u-mbe u-ŋgu ri ku-ryloþ
 ERG basket 3SG.POSS-old.one 3SG.POSS-in LOC IPFV-make.nest
 ‘The chough does not go in the forest and makes a nest there, but rather
 makes a nest (in ..., or) in old baskets, (or in ...)’ (22-CAGpGa, 48-53)

¹³In the Chinese original, …便主动要求嫁给国王 <biàn zhǔdòng yāoqíú jiàgěi guówáng> ‘... and she asked to marry the king of her own initiative’, what corresponds to the converbial clause is the adverb 主动 <zhǔdòng> ‘of ...’s own initiative’. This construction cannot be a calque.

35949 The adversative additive adverb *mýryrz* ‘instead’, ‘on the contrary’ (and its
 35950 variant *mýryrz ny*), semantically similar to Chinese 反而 <fǎn’ér> ‘instead’, specifically
 35951 indicates an undesirable result that occurs contrary to expectation instead
 35952 of the intended result.

35953 The clause expressing the intended result can take the comparative postposition
 35954 (standard marker) *srv* ‘compared with’ (§8.2.7), as in (114).

- 35955 (118) *pjy-kur-nuβlu-a tce, nuñu kur-p^hyn* *syznx, mýryrz*
 IFR-2→1-cheat-1SG LNK DEM SBJ:PCP-be.efficient COMP instead
 35956 *a-mp^huzz u-ntc^hur pa-nu-p^hut*
 1SG.POSS-bottom 3SG.POSS-piece AOR:3→3'-AUTO-take.off
 35957 ‘You cheated me, not only was (your healing method) not efficient (to
 35958 treat my illness), but it took off a chunk of my bottom. (140427 qala cho
 35959 kWrtsAG, 44)

35960 In most cases however, *mýryrz* occurs without any additional marker, as in
 35961 (119).

- 35962 (119) *cyr tce zŋgri nuu nuu-myrzaβ zo tce tur-kyrme c^hú-wy-ryci*
 night LOC star DEM AOR-marry EMPH LNK GENR.POSS-hair IPFV-INV-pull
 35963 *ri, c^hu-kui-zri mane, mýryrz juu-mjym ma.*
 LNK IPFV-PCP:SBJ-be.long not.exist:SENS instead SENS-hurt SFP
 35964 ‘In the night when there was a shooting star, we pulled our hair
 35965 (thinking that our hair would grow longer), but not only (our hair) did
 35966 not grow longer, (the only thing that it did) was hurt.’ (29-mWBZi, 108)

35967 25.6.1.3 Evidential rectification

35968 The Aorist *tr-md* (§21.5.1) of the verb *md* ‘arrive’ (of time), without comple-
 35969 ment clause, and following a clause with the adversative linker *ri*, has the special
 35970 meaning ‘actually’, ‘it turns out that...’, ‘but in fact ...’. It is specifically used when a
 35971 referent realizes that the reality (the rectification clause) was different from
 35972 his/her/its original belief or expectation.

35973 This construction is common in stories translated from Chinese, as in (120)
 35974 and (121), where *tr-md* corresponds to the Chinese linkers 结果 <jiéguō> ‘in the
 35975 end’ or 原来 <yuánlái> ‘it turns out that’.¹⁴

¹⁴For instance, the original of (121) is 原来是我的外甥来了 <yuánlái shì wǒ de wàishēng láile> ‘it turns out that (the one who came, you) is my nephew’.

- 35976 (120) <*huangshang*> *nur kui ko-mja tce to-rtob ri, nykinui,*
 emperor DEM ERG IFR-catch LNK IFR-look LNK FILLER
 35977 *tx-mdā tce, nunui nyki, əʊsəʊs kui-qarje kui*
 AOR-be.the.time LNK DEM FILLER paper SBJ:PCP-be.yellow ERG
 35978 *tx-ky-βzu pjy-cti.*
 AOR-OBJ:PCP-make IFR.IPFV-be.AFF
 35979 ‘(Wang Taichang_i was accused of holding an imperial robe, a crime
 35980 punishable by death) The emperor_j (had) him_i arrested, but when he_j
 35981 examined (the so-called imperial robe)_k it turned out that it_k was (just)
 35982 made of yellow paper.’ (150909 xiaocui-zh, 93-95)

35983 The rectification clause is always in the Inferential (§21.5.2), not only in nar-
 35984 ration as in (120), but also when reflecting the point of view of the speaker as in
 35985 (121).

- 35986 (121) *azō “nui ciu tui-ŋu kui” nui-suso-t-a ri, tx-mdā*
 1SG DEM who 2-be:FACT SFP AOR-think-PST:TR-1SG LNK AOR-be.the.time
 35987 *tce nykinui, a-ftsa pjy-tui-ŋu*
 LNK FILLER 1SG.POSS-ZCh IFR.IPFV-2-be
 35988 ‘I was wondering who you were, but it turns out that you are my
 35989 nephew!’ (150907 yingning-zh, 73-74)

35990 The adverb *təmdána* ‘actually’ in Tshobdun (Sun & Blogros 2019: 44;802) is
 35991 probably grammaticalized from a cognate construction.

35992 25.6.2 Addition

35993 25.6.2.1 Neutral addition

35994 Neutral additive constructions describe events that are related but for which nei-
 35995 ther a temporal sequence, a causal nor a hierarchical relationship can be assumed.
 35996 This type of meaning can be expressed by coordinated clauses (§25.1.6) with the
 35997 linkers *tce* or *qʰe* as in (122) or parataxis (123).

- 35998 (122) *zara χsum ma pjy-me-nui tce tcendyre nui-nuŋa*
 they three apart.from IFR.IPFV-not.exist-PL LNK LNK 3PL.POSS-cow
 35999 *ci pjy-tu.*
 INDEF IFR.IPFV-exist
 36000 ‘They were only the three of them, and they had a cow. (07-deluge, 3)

- 36001 (123) *wi-p^hoŋbu ra nui-wxti, nui-ts^hu zo.*
 3SG.POSS-body PL SENS-big SENS-fat EMPH

36002 ‘Its body is big and fat.’ (26-GZo, 12)

36003 A more specific way to indicate neutral addition is the comitative *c^ho* ‘and, with’ and its variants *c^hondyre* and *c^honr* (§8.2.5), which are used as a clause linkers in addition to its function as noun phrase coordinator.

- 36006 (124) *mbro syzny nui-wxti. nui-mbro c^ho nui-wxti.*
 horse comp SENS-be.big SENS-be.high COMIT SENS-be.big
 36007 ‘It is larger than a horse. Higher and larger.’ (19-rNamOn, 15)

36008 The coordinated clauses do not need to have a completely parallel syntactic
 36009 structure: in (125), the clause preceding *c^ho* has an adjectival stative predicate,
 36010 while the second one contains an existential verb with the nominal *k^hatob* ‘varie-
 36011 gated’ (§5.2.2).

- 36012 (125) *wi-ku nura rcanui, wuma zo nui-mpcyrr c^ho*
 3SG.POSS-head DEM:PL UNEXP:FOC really EMPH SENS-be.beautiful COMIT
 36013 *k^hatob zo yyzu*
 variegated EMPH exist:SENS
 36014 ‘Its head, it is very beautiful, and variegated.’ (24-qro, 84)

36015 The comitative *c^ho* can follow the linkers *q^he* and *tce* when used to link clauses
 36016 as in (126), but notice that the emphatic marker (§26.1.1.5) and the linker *zo* *q^he*
 36017 are repeated in both the clause preceding *c^ho* and the one following it.

- 36018 (126) *tce nui wi-ryi a-my-pui-ce ra ma*
 LNK DEM 3SG.POSS-grain IRR-NEG-PFV:DOWN-go be.needed:FACT LNK
 36019 *pjui-tsyi my-c^ha tce tcendyre a-nui-rci zo q^he*
 IPFV-be.rotten NEG-can:FACT LNK LNK IRR-PFV-get.wet EMPH LNK
 36020 *c^ho ftcar a-ky-ndzob zo q^he li tu-łob*
 COMIT summer IRR-PFV-ACaus:attach EMPH LNK again IPFV-come.out
 36021 *cti*
 be.AFF:FACT
 36022 ‘One should not let its grains go into (the ground), because they cannot
 36023 rot, and when they get wet and the spring comes, they grow again.’
 36024 (-08-qajAGi, 48)

36025 25.6.2.2 Correlative addition

36026 The correlative (§25.1.2) additive focus markers *tci* and *ri* (§9.1.6.2) follow noun
 36027 phrases in a series of two or more clauses in parataxis. The main verbs of these
 36028 clauses are often identical and redundant, but are not always necessarily so, as
 36029 in (127), where a clause with *tsʰi* ‘drink’ is conjoined with clauses with *ndza* ‘eat’
 36030 as main verb.

- 36031 (127) [ca] *tci pui-ndze*, [cyci] *tci pui-tsʰi*, [ty-lu
 meat also SENS-eat[III] meat.stew also SENS-drink INDEF.POSS-milk
 36032 *ta-mar*] *tci pui-ndze*
 INDEF.POSS-butter also SENS-eat[III]
 36033 ‘(Pigs) eat meat, drink meat stew, and also eat butter and have milk.’
 36034 (05-paR, 30)

36035 These markers can also have scope over verbs, in the existential construction
 36036 as in (128) or with a modal auxiliary verb as main predicate as (129). The meaning
 36037 of this construction is ‘both X and Y’ when used with positive copulas or modal
 36038 verb, and ‘neither X nor Y’ with negative ones.

- 36039 (128) *kuroz kui-mum ri maye, kuroz*
 specially SBJ:PCP-be.tasty also not.exist:SENS specially
 36040 *mx-kui-yx-mjxt ri maye qʰe,*
 NEG-SBJ:PCP-FACIL-be.spoiled also not.exist:SENS LNK
 36041 ‘‘(Scoring bread) neither (makes it) particularly tasty nor particularly
 36042 (prevents it from) spoiling.’ (160706 thotsi, 27)
- 36043 (129) *tcendyre tu-ruacmi ri mx-kui-kʰui, cʰui-nurxyo ri*
 LNK IPFV-speak also NEG-SBJ:PCP-be.possible IPFV-sing also
 36044 *mx-kui-kʰui ci px-k-χβzu-ci.*
 NEG-SBJ:PCP-be.possible INDEF IFR-PEG-become-PEG
 36045 ‘She became unable to speak and to sing.’ (150819 haidenver-zh, 301)

36046 25.6.2.3 Incremental addition

36047 Four constructions meaning ‘not only ... but also ...’ (called in Chinese 递进复句
 36048 <dìjìn fùjù> ‘incremental complex clause’) are found in Japhug.

36049 First, the locutions *bo alala ri* or *bo alala ma*, comprising the adversative topic
 36050 marker *bo* (§9.1.5.3) and the adversative *ri* (§25.6.1.1), can express incremental
 36051 addition as in (130).

- 36052 (130) *wzo [pjy-mpcyr]* *bo* *alala* *ri, ryo ri*
 3SG IPFV.IFR-be.beautiful ADVERS not.only LNK song also
 36053 *pjy-mk^hyz, tui-rfaz* *ri pjy-mk^hyz.*
 IFR.IPFV-be.expert NMLZ:ACTION-dance also IFR.IPFV-be.expert
 36054 ‘Not only was he good-looking, he was also expert at singing and
 36055 dancing.’ (160702 luocha-zh, 4)
- 36056 Second, the relator noun *w-txju* ‘addition’, an alienabilized abstract noun (§16.4.2)
 36057 from which the denominal verb *yxju* ‘add’ was originally derived, has the gram-
 36058 maticalized meaning ‘in addition to X’, ‘not only X, but also Y’ when used as
 36059 clausal linker as in (131).
- 36060 (131) *[cuu-mjym] w-txju tce nuu-sxzoyzoy*
 CAUS-hurt:FACT 3SG.POSS-addition LNK SENS-cause.numbing.sensation
 36061 *zo nyu*
 EMPH be:FACT
 36062 ‘Not only does (nettle sting) hurts, it also cause a numbing sensation.’
 36063 (140428 mtshalu, 6)
- 36064 The noun *w-txju* can also follow the demonstrative *nuu* (§6.9.1), anaphorically
 36065 referring to the preceding clause(s) (132).
- 36066 (132) *rjylpu nuu kui wuma zo* (...) *tó-wy-raxtcyz,*
 king DEM ERG really EMPH IFR-INV-cherish
 36067 *jy-wy-mgrun. tce nuu w-txju tce tcendyre li*
 IFR-INV-receive.as.guest LNK DEM 3SG.POSS-addition LNK LNK again
 36068 *icq^ha nuu, ur-zaβ ra jy-car.*
 FILLER DEM 3SG.POSS-wife PL IFR-search
 36069 ‘The king (...) treated him well as a guest, and in addition found a wife
 36070 for him.’ (140511 xinbada-zh, 33-35)
- 36071 Third, the locution *myra ma*, which is possibly grammaticalized form the ne-
 36072 gative form of the modal verb *ra* ‘be needed’, ‘be necessary’ (§24.5.3.1) with the
 36073 adversative linker *ma* (§25.6.1.1), also has the same meaning as the constructions
 36074 described above.
- 36075 (133) *tutseye w-kui-βzu nuu kui paxci muu-jy-mbi myra ma*
 commerce 3SG.POSS-make DEM ERG apple NEG-IFR-give not.only LNK
 36076 *nuu szyny to-nymqe tce jo-suix-ce.*
 DEM COMP IFR-SCOLD LNK IFR-CAUS-go
 36077 ‘The merchant not only did not give him (any) apple, but instead scolded

25 Other types of multiclausal constructions

36078 him and sent him away.' (150904 zhongli-zh, 15)

36079 Fourth, the form *m̥kujyy kuu*, from the negative participle or infinitive of ei-
36080 ther the modal auxiliary *jyy* 'be allowed' (§24.5.3.1) or the phasal verb *jyy* 'finish'
36081 (§24.5.6.2), also means 'not only X, but' as in (134).

- 36082 (134) *tx-mt^hum nura tu-ndze m̥kujyy kuu, ur-di*
INDEF.POSS-meat DEM:PL IPFV-eat[III] not.only ERG 3SG.POSS-smell
36083 *nua-cuu-mnym*
SENS-CAUS-smell
36084 'Not only does (the mouse) eat meat, it also makes it stinky.'
36085 (27-spjaNkW, 198)

36086 When the first clause is in negative form as in (133), the meaning of incremen-
36087 tal additive construction is similar to the adversative additive construction with
36088 *m̥yryz* 'instead' 'not only $\neg X$, but on the contrary Y ' (§25.6.1.2). The locution *nua*
36089 *syz(m)* 'rather than that, instead' can be added in the second clause.

36090 These first three additive markers also found on noun phrases, instead of sub-
36091 ordinate clauses (§9.1.6.3).

36092 25.6.3 Exceptive

36093 25.6.3.1 *laṣma* 'apart from the fact that'

36094 The postposition *laṣma* 'apart from the fact that', which derives from the excep-
36095 tive postposition *ma* 'apart from' (§8.2.8), cannot take a noun phrase, and requires
36096 a finite clause instead, as in (135)

- 36097 (135) *tce [u-rq^hu nua yurni] laṣma u-ŋguu nua*
LNK 3SG.POSS-skin DEM be:red:FACT apart.from 3SG.POSS-inside DEM
36098 *syku c^ho nua-naxtcuy-ndzi ri*
white.birch COMIT SENS-be.the.same-DU LNK
36099 'Apart from the fact that its bark is red, its inside is the same as that of
36100 the white birch.' (06-mbrAj, 13)

36101 The semantic scope of *laṣma* can however be a noun phrase, if the verb in the
36102 exceptive clause is repeated in the main clause, as in (136).

- 36103 (136) [ky-ky-pu ky-ky-sqa kur-fse nura
 AOR-OBJ:PCP-bake AOR-OBJ:PCP-cook SBJ:PCP-be.like DEM:PL
 my-ndze] lañma, nua u-ro nua lonba tu-ndze
 NEG-eat:FACT apart.from DEM 3SG.POSS-rest DEM all IPFV-eat
 cti.
 be.AFF:FACT
 'Apart from the fact that it does not eat food that has been baked or
 cooked, it eats everything else (=apart from cooked food, it eats
 everything else).' (19-GzW, 11)

36109 **25.6.3.2 *tc^himazny* ‘at least’**

36110 The linker *tc^himazny* or *tc^himas*, optionally combined with *tsaꝝ* ‘just, only’, occurs
 36111 in imperative or hortative sentences with the meaning ‘at least’. As illustrated
 36112 by (137) (where *tsaꝝ* occurs in one version of the story, and does not occur in
 36113 the other) and (138), *tc^himazny* is placed at the beginning of the clause, while *tsaꝝ*
 36114 either follows the verb or a constituent overt which it has scope.

- 36115 (137) wortc^hi wojyr zo tc^himazny a-yi ra nua-p^he
 please please EMPH at.least 1SG.POSS-relative PL 3PL.POSS-DAT
 36116 cii-ryfcyt-tci (*tsaꝝ*) ma tcet^ha yui-nuzduwy-a-nua
 TRAL-tell:FACT-1DU just LNK later INV-worry.about:FACT-1SG-PL
 36117 'Please, at least let the two of us go and inform my relatives, otherwise
 36118 they will be worried about me.' (qachGa 2012, 76)
- 36119 (138) tc^himas "puu-tuu-χeu" tsaꝝ tu-ti-a ma
 at.least PST.IPFV-2-be.strong just IPFV-say-1SG LNK
 36120 'I (should) say at least ‘thank you’.' (2014-kWLAG, 624)

36121 The linker *tc^himazny* is built from the interrogative pronoun *tc^hi* ‘what’ (§6.5.1),
 36122 the negative copula *maꝝ* ‘not be’ (§13.1.2) and the postposition *nꝝ* (§8.2.6). The
 36123 original meaning of this locution was probably ‘whatever it is not’, with the free-
 36124 choice indefinite function of *tc^hi* (§6.6.6).

36125 **25.6.4 Disjunction**

36126 Exclusive disjunction is expressed by the linker *numazny*, either between the two
 36127 alternative clauses as in (139) or in a correlative construction (§25.1.2), repeated
 36128 before each clause (140).

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- 36129 (139) *tce c^hui-βde-nuu numabny fsapav nu-mbi-nuu*
 LNK IPFV-throw-PL otherwise animal IPFV-give-PL
 36130 *ŋgryl ma*
 be.usually.the.case:FACT LNK
 36131 ‘(People uproot it) and either throw it away, or give it to the animals (to
 36132 eat).’ (12-Zmbroko, 120-122)
- 36133 (140) *numabny tú-wy-nuu-xsur, numabny <ban> tú-wy-βzu tce.*
 otherwise IPFV-INV-AUTO-fry otherwise mix IPFV-INV-make LNK
 36134 ‘People either fry it, or mix it in salad.’ (conversation 14-05-10)

36135 The linker *numabny* ‘otherwise’ has stress on the second syllable (*numábn̥y*),
 36136 and transparently comes from the demonstrative *nū* (§6.9.1), the copula *maš* ‘not
 36137 be’ (§13.1.2) and the adposition *ny*, probably from what originally was the protasis
 36138 of a conditional construction ‘if it is not’, with initial reduplication †*nū muu~maš*
 36139 *ny* or Interrogative †*nū ú~maš ny* (§25.2.1, §12.4.1.2).

36140 In questions, disjunction between several clauses can be express by adding the
 36141 interrogative particle *ci* after each clause except the last, as in (141).

- 36142 (141) *χsyr rjyskxt ui-taš tui-nui-ce ci, rŋual rjyskxt ui-taš*
 gold stairs 3SG.POSS-on 2-AUTO-go:FACT SFP silver stairs 3SG.POSS-on
 36143 *tui-nui-ce ci, com rjyskxt ui-taš tui-nui-ce ci, si*
 2-AUTO-go:FACT SFP iron stairs 3SG.POSS-on 2-AUTO-go:FACT SFP wood
 36144 *rjyskxt ui-taš tui-nui-ce?*
 stairs 3SG.POSS-on 2-AUTO-go:FACT
 36145 ‘Will you go on the golden stairs, the silver stairs, the iron stairs, or the
 36146 wooden stairs? (2005 Kunbzang, 214)

36147 Both *numabny* ‘otherwise’ and *ci* are only very rarely used with noun phrases
 36148 instead of clauses (§9.2.3).

26 Degree and comparison

26.1 Absolute degree and intensifiers

This section describes the constructions available to express the absolute degree of a property of a referent, without standard of comparison.

All degree constructions can be used with the emphatic marker *zo*, either following a degree adverb, or in sentence-final position (§22.2.7).

26.1.1 Degree adverbs

Degree adverbs in Japhug are intensifiers meaning ‘really, much, very, a lot’. There is also a comparative degree adverb *mrzui* ‘even more’ (treated in §26.2.3 below) and a superlative adverb *stu* ‘most’ (§26.4.1). There are no adverbs indicating a degree above or under a limit such as ‘too much’ or ‘not enough’; the degree nominal construction must be used instead to express this meaning (§26.1.2.1).

26.1.1.1 *wuma* ‘real, really’

The most common intensifier in Japhug is *wuma* ‘really’, from Tibetan ལྕ མ ཡ མ *yo.ma* ‘real, true’. While marginally attested as a postnominal attribute meaning ‘real’ (§9.1.8.1), its most widespread function is to serve as clausal intensifier, with (1a) or without (1b) the emphatic marker *zo*.

- (1) a. *nura juu-fse tce wuma zo juu-ŋgu-tci*
DEM:PL SENS-be.like LNK really EMPH SENS-be.poor-1DU
‘We are very poor like that.’ (divination, 14)
- b. *a-mu cʰo wuma juu-ŋgu-tci*
1SG.POSS-mother COMIT REALLY SENS-be.poor-1DU
‘My mother and I are very poor.’ (divination, 25)

The intensifier is not necessarily adjacent to the verb, and some constituents can be inserted, for instance absolute nouns in essive function (§8.1.7) such as *turme* ‘as a person’ in (2).

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- 36173 (2) *w-χti nuu wuma zo turme pe ma*
 3SG.POSS-companion DEM really EMPH person be.good:FACT LNK
 36174 ‘Her husband is a very nice person (very nice as a person).’ (14-siblings,
 36175 350)

36176 The flexibility in the position of *wuma* can be useful to distinguish head-internal
 36177 relatives from postnominal ones (§9.1.8.3, §23.4.3, §23.5.1.1).

36178 The intensifier *wuma* is not restricted to adjectival stative verbs. It can be
 36179 used with tropative verbs (§17.5) as in (3), but also modal verbs such as *cʰa* ‘can’
 36180 (§24.5.3.2) and action verbs that do not have an intrinsic degree parameter such
 36181 as *ndza* ‘eat’ (4).

- 36182 (3) *tce nuu t'-wy-tcxt tce nuŋa nuu kuu wuma juu-nx-myxm*
 LNK DEM AOR-INV-take.out LNK COW DEM ERG really SENS-TROP-hurt
 36183 ‘When one removes (the parasite by squeezing it out), the cow finds it
 36184 very painful.’ (25-zrW, 28)

- 36185 (4) *maka t̪ci qaj nuura wuma zo ndze.*
 at.all barley wheat DEM:PL really EMPH eat[III]:FACT
 36186 ‘(The dove) eats wheat and barley a lot.’ (22-CAGpGa, 30)

36187 When *cʰa* ‘can’ takes an infinite complement, *wuma* generally follows the com-
 36188 plement clause, as in (5), whereas with finite complements it is generally located
 36189 inside of the complement clause (6).

- 36190 (5) *[si k̪y-pʰab] wuma zo cʰa-a*
 tree INF-chop really EMPH can:FACT-1SG
 36191 ‘I am very good at felling trees.’ (2011-10-qajdo, 3)

- 36192 (6) *tur-ji w-ŋguu zuu tsʰyt w-yli nuu*
 INDEF.POSS-field 3SG.POSS-in LOC goat 3SG.POSS-manure DEM
 36193 *cʰú-wy-lyt tce, [t̪y-ryku wuma zo tu-sxpe]*
 IPFV-INV-release LNK INDEF.POSS-crops really EMPH IPFV-do.well
 36194 *cʰa*
 can:FACT
 36195 ‘When one puts goat manure in fields, it can do a lot of good to the crops.’
 36196 (05-qaZo, 34)

36197 The intensifier *wuma* can be combined with *stʰuci* ‘as much’ (§5.8.4).

- 36198 (7) *nur fsapab ra kuu ndza-nuu ri, wuma st^huci my-rga-nuu.*
DEM animal PL ERG eat:FACT-PL LNK really so.much NEG-like:FACT-PL
36199 ‘The animals eat it, but don’t like it so much.’ (12-Zmbroko, 100)

36200 **26.1.1.2 *k^hro* ‘much’**

36201 The adverbs *k^hro* ‘much’ and *zimk^hym* ‘much’ can serve as intensifiers of noun
36202 phrases (§9.1.3.4) but can also have scope over the whole clause, in pre-verbal
36203 position. Unlike *wuma* and *nust^huci/kuust^huci* (§26.1.1.3), they are more often used
36204 with action verbs, and can both refer to the quantity and intensity of actions
36205 ('much', 'a lot') or to the time taken by the action ('for a long time'), as in (8) and
36206 (9), respectively.

- 36207 (8) *k^hro zo pjy-ŋke pjy-ra tcendyre, pjy-nuzwif.*
much EMPH IFR.IPFV-walk IFR.IPFV-be.needed LNK IFR-sleep
36208 ‘He had to walk a lot (on that day, was very tired), and fell asleep.’ (140430
36209 yufu he tade qizi-zh, 236)
- 36210 (9) *k^hro zo pjy-car ri mui-pjy-mto*
much EMPH IFR-search LNK NEG-IFR-see
36211 ‘(The prince) looked for her for a long time, but could not find her.’
36212 (140504 huiguniang-zh, 190)

36213 Both intensifiers can be reduplicated as *k^huu~k^hro* and *zuu~zimk^hym* as in (10).

- 36214 (10) *zur~zimk^hym zo aŋyndundxt zo pjy-nyt^hut^hu*
EMPH~much EMPH everywhere EMPH IFR-DISTR:ask
36215 ‘(The bear) asked around (about the rabbit) everywhere for a long time.’
36216 (2011-13-qala, 20)

36217 The adverb *zimk^hym* comes from *ziŋ.k^hams* ‘country, universe’ (also bor-
36218 rowed as the noun *ziŋk^hym* ‘country, realm’, sometimes also pronounced *zimk^hym*),
36219 and its grammaticalization as an intensifier perhaps went through a semantic
36220 change ‘universe’ ⇒ ‘in the whole universe, universally’ ⇒ ‘everywhere’ ⇒ ‘for
36221 a long time; much’.

36222 **26.1.1.3 Demonstrative+st^huci ‘as much’**

36223 The combinations of the adverbs *st^huci* ‘as much’ and *st^hamtçrt* ‘as much’ (§5.8.4)
36224 occur with anaphoric demonstratives (§6.9) to express the meaning ‘so (much)’.

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The demonstratives can be in free form, but can also merge with *st^huci* and *st^hamtçṛt* into the degree adverbs *kust^huci* ‘this much’ (11), *must^huci* ‘that much’, *kust^hamtçṛt* ‘this much’ and *nust^hamtçṛt* ‘that much’ (12).

- (11) *a-rzaβ ri kust^huci nu-mpcyr, a-mbro ri*
1SG.POSS-wife also so.much SENS-be.beautiful 1SG.POSS-horse also
kust^huci nu-zru, a-pyxtcwri kust^huci nu-mpcyr
so.much SENS-be.strong 1SG.POSS-bird also so.much SENS-be.beautiful
‘My wife is so beautiful, my horse so strong, my bird so beautiful.’
(2003qachga, 116)

These degree adverbs can directly precede the verb as in (11), but can also occur before the subject as in (12).

- (12) *t^hui-kui-ndžaβ nu to-ndzur q^he, li pjv-rjaz.*
AOR-SBJ:PCP-ACAUS:cause.to.roll DEM IFR-stand LNK again IFR-dance
nust^hamtçṛt zo icq^ha ui-juli nu
that.much EMPH the.aforementioned 3SG.POSS-flute DEM
pjv-mpcyr.
IFR.IPFV-be.beautiful
‘(The rich man_i started dancing under the influence of the music, fell down). The one_i who had fallen down stood up and danced again. This was the extent to which (the shepherd boy’s) flute (music) was beautiful (his flute music was *that* beautiful).’ (140513 mutong de disheng-zh, 163-164)

The demonstrative can anaphorically refer to a previous entity or a previous clause, as in (12), where it is focalized.¹

26.1.1.4 Unexpected degree

The unexpected/high degree marker *rca* or *rcanu* indicates that the situation or action described by the predicate that follows is unexpected (13), intensifies to a noticeable (and not foreseeable) extent (14) or occurs with a remarkably high degree or intensity, with (15) or without (16) surprise.

¹Although from a text translated from Chinese, this sentence was added by Tshendzin and is not in the original.

- 36249 (13) *wo nyzo rcanuⁱ tc^{hi} pui-tur-nyme ηu ma, azo*
 INTERJ 2SG UNEXP:DEG what SENS-2-do[III] be:FACT LNK 1SG
 36250 *tui-mui kui pui-kui-sui-χtci-a, t^undzo nui!*
 INDEF.POSS-sky ERG AOR-2→1-CAUS-wash-1SG cold SFP
 36251 ‘You, what are you doing, you caused me to be drenched by the rain.’
 36252 (kWLAG 2014, 157)
- 36253 (14) *to-k-ynumqaj-ndzi-ci tce rcanu, zuruuzyri tce*
 IFR-PEG-RECIP:scold-DU-EVD LNK UNEXP:DEG progressively LNK
 36254 *ko-k-yndundo-ndzi-ci,*
 IFR-PEG-RECIP:take-DU-PEG
 36255 ‘They scolded each other and progressively started to fight,’ (IWlu2002,
 36256 52)
- 36257 (15) *mbro rcanu u-xext kui-tui-tu zo nui-nts^hyr*
 horse UNEXP:DEG 3SG.POSS-strength SBj:PCP-EMPH~exist EMPH AOR-neigh
 36258 *pui-nu,*
 SENS-be
 36259 ‘The horse neighed with all his strength.’ (qachGa2003, 158)

36260 The adverb *rcanu* is particularly common in the degree construction with a
 36261 *tui-* degree nominal (§16.3), as in (16). In this particular construction, *rcanu* does
 36262 not necessarily express unexpectedness.

- 36263 (16) *tce nunuu lulu a-pui-me rcanu, βzui*
 LNK DEM cat IRR-IPFV-not.exist UNEXP:DEG mouse
 36264 *u-tui-ηyn saxar.*
 3SG.POSS-NMLZ:DEG-be.evil be.extremely:FACT
 36265 ‘If there are no cats, the mice are extremely fierce (cause a lot of
 36266 damages).’ (21-IWlu, 32)

36267 In addition to its function as a degree adverb, *rcanu* also contributes to infor-
 36268 mation structure: it marks the constituent preceding it as a topic, and the part of
 36269 the sentence following it as a focus.

36270 26.1.1.5 Emphatic

36271 The emphatic marker *zo* is one of the most common words in Japhug. It is never
 36272 obligatory, but frequently occurs after all the intensifiers described above.

36273 It is one of the few adverbs that can follow the main verb (§22.2.7, §23.3.6), in
 36274 particular with the stative verb *saxar* ‘be extremely’ as in (§17).

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- 36275 (17) *txŋe u-rkua* *tx-armbat* *q^he u-tur-sy-cke*
sun 3SG.POSS-side AOR:UP-be.near LNK 3SG.POSS-NMLZ:DEG-PROP-burn
36276 *pjy-saχas* *zo* *ri*
IFR.IPFV-be.extremely EMPH LNK
36277 ‘When he approached the sun, it was extremely hot.’ (31-deluge, 112)

36278 It also occurs after ideophones (§10.1.7) and deideophonic verbs (§20.9).
36279 With personal pronouns, the emphatic *zo* can mean ‘by oneself’, as in (18)
36280 (§6.4).

- 36281 (18) *azō zo numu c-pjuu-sat-a ra*
1SG EMPH DEM TRAL-IPFV-kill-1SG be.needed:FACT
36282 ‘I have to kill her myself.’ (140504 baixuegongzhu, 117)

36283 It also appears on various types of subordinate clauses, in particular manner
36284 clauses (including serial verb constructions §25.4.1.4 and converbial clau-
36285 ses §25.4.2, §16.6.1.3), some temporal and conditional clauses (§16.6.3, §25.2.3.3,
36286 §25.3.1) and in neutral addition clauses (§25.6.2.1).

36287 The emphatic marker may be historically related to the *-zo* stem of personal
36288 pronouns (§6.1) or, alternatively, be cognate to the Tibetan particle འད: *jaŋ* ‘also,
36289 even’.

26.1.2 Degree nominals

26.1.2.1 Monoclausal degree nominal construction

36292 An alternative way to indicate the degree of a stative predicate is to use degree
36293 nominals (§16.3, §16.3.4) as intransitive subjects of degree verbs like *saxas* ‘be
36294 extremely’, *syre* ‘be ridiculous’, ‘be extremely’ (19), *tç^hom* ‘be too much’ (21) or *rtaš*
36295 ‘be enough’ (20). The TAME is expressed on the degree verb, which is always in
36296 3SG (§14.2.7). Degree nominals can also serve as possessors of the subject *u-grvł*
36297 ‘order, rule’ in the collocation *u-grvł + me* ‘be extremely’ (example 111 in §22.4.1.3).

- 36298 (19) *azō kūnys a-xtu u-tuu-mjym jnu-syre*
1SG also 1SG.POSS-belly 3SG.POSS-NMLZ:DEG-hurt SENS-be.extremely
36299 *zo*
EMPH
36300 ‘Me too, my belly hurts a lot.’ (literally: ‘the degree of my hurting is
36301 ridiculously high’) (qala 2002, 17)

- 36302 (20) *kuki tuu-ci ki u-tuu-rnab*
DEM.PROX INDEF.POSS-water DEM.PROX 3SG.POSS-NMLZ:DEG-be.deep
36303 *múij-rtaš*
NEG:SENS-be.enough
36304 ‘This water is not deep enough.’ (2010-03-zh, 4)

36305 The use of *syre* as degree verbs illustrates a semantic change from ‘funny,
36306 ‘ridiculous’ to intensifier, similar to that of French *drôlement* (*drôlement difficile*)
36307 or of English *ridiculously* (*ridiculously difficult*).

36308 The possessive prefix is coreferent with the entity whose property is referred
36309 to by the nominalized verb, for instance 2SG in (21).

- 36310 (21) *nvzo nv-tuu-xtci tc^hom-o*
2SG 2SG.POSS-NMLZ:DEG-be.small be.too.much:FACT-SFP
36311 ‘You are too young.’ (150828 huamulan-zh, 28)

36312 Causative forms of degree verbs (§17.2.6), for instance *yxtc^hom* ‘cause to be too
36313 much’, can also be occur with degree nominals, as in (22).

- 36314 (22) *kuki maka u-tuu-cqraš*
DEM.PROX at.all 3SG.POSS-NMLZ:DEG-be.intelligent
36315 *tx-yx-tc^hom-a uþry-ŋu ye?*
AOR-CAUS-be.too.much-1SG RH.Q-be:FACT SFP
36316 ‘I hope that I did not cause her to become too intelligent.’ (hist160709
36317 riquet6-v2)

36318 With *naχtçuy* ‘be the same’ as degree verb, the degree construction becomes an
36319 equative construction (§26.3.1), with the comitative postposition *c^ho* ‘and, with’
36320 (§8.2.5).

- 36321 (23) *zmbri c^ho u-tuu-wxti naχtçuy*
willow COMIT 3SG.POSS-NMLZ:DEG-be.big be.the.same:FACT
36322 ‘It is as big as a willow (its degree of “bigness” is the same as that of a
36323 willow).’ (08-qaCti, 3)

36324 The lexicalized infinitive form *kr-ti* of the verb *ti* ‘say’ and the ergative can
36325 optionally follow the degree nominal (24).

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- 36326 (24) *kvtsa ni ndzi-tui-ŋgu kx-ti ku*
 parent.and.child DU 3DU.POSS-NMLZ:DEG-be.poor INF-say ERG
 36327 *pui-saxas zo*
 PST.IPFV-be.extremely EMPH
 36328 ‘The mother and her child were extremely poor.’ (Norbzang 2005, 152)

36329 Degree nouns are not the only type of nouns that can occur in this construc-
 36330 tion. Abstract nouns in *tx-* (§16.4.2) such as *txcpas* ‘thirst’ (25) or underived ab-
 36331 abstract nouns such as *rystom* ‘outrage’ can also be used, though much less com-
 36332 monly. This construction however differs from the previous one in that the de-
 36333 gree verb *saxas* indexes the experiencer as intransitive subject (3PL in 25).

- 36334 (25) *tx-cpas kx-ti ku pui-saxas-nua zo*
 NMLZ:ABSTRACT-thirst INF-say ERG PST.IPFV-be.extremely-PL EMPH
 36335 *pui-ryzi-nua juu-ŋu*
 PST.IPFV-stay-PL SENS-be
 36336 ‘(The people there) live in extreme thirst.’ (divination 2005, 8)

36337 Example (25) is in addition a hybrid construction combining the abstract nom-
 36338 inal and the degree verb with a serial verb construction of degree (§26.1.3).

36339 Without degree verb, degree nominals and other abstract nouns can be used
 36340 as predicates to express high degree in exclamation (§16.3.3), often with the sen-
 36341 tence final particle *nu*, as in (26).

- 36342 (26) *nx-tui-syjndyt nu!*
 2SG.POSS-NMLZ:DEG-be.cute SFP
 36343 ‘You are so cute!’ (heard in context)

26.1.2.2 Consequence degree construction

36344 Degree nominals and abstract nouns can also occur with the ergative marker *ku*
 36345 followed by a finite clause describing a consequence or a particular aspect of the
 36346 high degree reached (‘so X that Y’; in the following, the clause X is referred to as
 36347 ‘degree clause’, and Y as ‘consequence clause’), as in (27). This type of construc-
 36348 tion is a subtype of causality clause linking (§25.5).

- 36350 (27) *wu-tuu-nymbju* *kua* [r_jy_lpu k^hvxt_yndo] *kua-nujaysa*
 3SG.POSS-NMLZ:DEG-be.shiny ERG king side.of.the.roof SBJ:PCP-be.idle
 36351 *nua* *yua* *wi-mrau* *na-z-nymbju* *zo* *nua-ηu].*
 DEM GEN 3SG.POSS-eye AOR:3→3'-CAUS-be.shiny EMPH SENS-be
 36352 'It was so shiny that it dazzled the eyes of the king, who was staying idle
 36353 on the side of the roof (of the palace).' (Norbzang 2005, 177)

36354 It is possible for several degree nominals to share a consequence clause. For
 36355 instance, in (28), the degree nouns *nua-tuu-γyuzruy* and *a-tuu-γyuzruy* are followed
 36356 by only one marker *kua* and have a common consequence clause *múj-cha-a*. Here,
 36357 the additional clause *ci tu-pe tce* 'putting together' specifies that it is the conjoined
 36358 quantity (of lice) referred by the two degree nominals that is the cause of the
 36359 consequence clause, and therefore implies that the absence of a consequence
 36360 clause just after the first degree noun *nua-tuu-γyuzruy* is not due to ellipsis.

- 36361 (28) *pab ra ci* *nua-tuu-γyuzruy*, *azō ci*
 pig PL one 3SG.POSS-NMLZ:DEG-have.a.lot.of.lice 1SG one
 36362 *a-tuu-γyuzruy* *kua* [*ci tu-pe* *tce*
 1SG.POSS-NMLZ:DEG-have.a.lot.of.lice ERG one IPFV-do[III] LNK
 36363 *múj-c^ha-a]*
 NEG:SENS-can-1SG
 36364 'Pigs have so many lice and I have so many lice that all put together, I
 36365 can't bear it.' (2005 Kunbzang, 43)

36366 As in the monoclausal construction, the lexicalized infinitive form *ky-ti* of *ti*
 36367 'say' can optionally be added before the ergative, as in (29) (see also 140, §22.4.2.4).

- 36368 (29) *wu-tuu-pat* *ky-ti* *kua* [*wu-ct_gi* *ra to-łor.*]
 3SG.POSS-NMLZ:DEG-be.tired INF-say ERG 3SG.POSS-sweat PL IFR-come.out
 36369 'He was so tired that he started sweating (profusely).' (140513 mutong de
 36370 disheng-zh, 70)

36371 The same meaning '... is so X that ...' can also be expressed by a finite clause
 36372 X followed by the relator noun *wi-xçyt* 'strength' with the ergative *kua* (§8.3.6.2,
 36373 §25.5.2), as in (30).

- 36374 (30) *nua-maq^bu* *wi-xçyt* *kua*, [*kua-fsob* *tx-ryngat* *ri*
 IPFV-be.after 3SG.POSS-strength ERG SBJ:PCP-be.light AOR-be.about LOC
 36375 *kóymuaz* *tu-łor* *ŋu.]*
 only.then IPFV-come.out be:FACT
 36376 '(This star) is so late that it only comes out when the day is about to

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36377 break.' (29-mWBZi, 41)

36378 26.1.3 Serial verb construction

Some stative verbs of degree (in particular *t̪hom* ‘be too much’ and *rtaꝝ* ‘be enough’) can occur in a serial verb construction (§25.4.1.5) with the same meaning as the monoclausal degree construction (§26.1.2.1): examples (31a) and (31b) are synonymous, though the former is more frequent.

- 36383 (31) a. *wi-tuu-xtci* *jui-tc^hom*
 3SG.POSS-NMLZ:DEG-be.small SENS-be.too.much

36384 b. *jui-xtci* *jui-tc^hom*
 SENS-be.small SENS-be.too.much
 'It is too small.' (elicited)

The serial verb construction as a whole can serve as a complement clause, as in (32) where the constituent between square brackets is the subject of the verb *múj-pe* ‘it is not good’ (§24.5.8).

- 36389 (32) [nuŋa ra nu-tas tu-dyn tu-tc^{hom}] míuj-pe
 cow PL 3PL.POSS-on IPFV-be.many IPFV-be.too.much NEG:SENS-be.good

36390 ma
 LNK

36391 'It is not good when there are too many (ticks) on cows.' (25-xCelwi, 31)

36392 26.1.4 Exceptive

³⁶³⁹³ A manner clause (§25.4) containing the exceptive phrase *nu ma* ‘apart from that’ (§8.2.8) and a negative verb form can convey an extreme degree, as in (33).²

- 36395 (33) a. *nui ma azo maka, kχ-nui-rga muij-k^hur zo*
DEM apart.from 1SG at.all INF-APPL-like NEG:SENS-be.possible EMPH

36396 *nui-rga-a*
SENS-like-1SG

36397 'I like it extremely (to the extent that it is not possible to like it more
than I do).' (140521 huangdi de xinzhuang-zh, 141)

36398

²Example (33a) is a rendering of Chinese 我表示十二分地满意 <wǒ biǎoshì shíèr fēn de mǎnyì>, a sentence that plays on the expression 十分满意 <shífēn mǎnyì> ‘100% satisfied’.

- 36399 b. *nua ma ky-nua-rga my-kua-k^hua zo*
DEM apart.from INF-APPL-like NEG-INF:STAT-be.possible EMPH
- 36400 *nua-rga-a*
SENS-like-1SG
- 36401 ‘I like it extremely.’ (elicitation based on 33a)

26.2 Comparative

36403 Adjectival stative verbs in Japhug do not have specific comparative or superlative
36404 forms,³ and comparison is expressed by means of postpositions, adverbs or verbs
36405 marking relative degree.

26.2.1 The postpositions *syz* and *kua*

36407 As illustrated in (34), it is possible in Japhug to mark both the standard of com-
36408 parison (by the postposition *syz* ‘than’, §8.2.7), and the comparee (by the ergative
36409 *kua* (§8.2.2.7).⁴

- 36410 (34) *wi-βi syz u-pi nua*
3SG.POSS-younger.sibling COMP 3SG.POSS-elder.sibling DEM
STANDARD STANDARD.MARKER COMPAREE
- 36411 *kua mpcyr*
ERG be.beautiful:FACT
COMPAREE.MARKER PARAMETER
- 36412 ‘The elder (sister/brother) is more beautiful than the younger (sister/brother).’
- 36413 (elicited)

36414 The comparee marker is optional when the standard phrase is overt, as shown
36415 by (35), where the comparee *w-rzaβ* ‘his wife’ is in absolute form.

- 36416 (35) *wi-rzaβ azo syz wxti*
3SG.POSS-wife 1SG COMP be.big:FACT
‘His wife is older than me.’ (14-siblings, 200)

³There is one potential example of a comparative derivation in Japhug between *sna* ‘be good, be worthy’ and *mna* ‘be better’ (§19.7.10), but in the additional examples, this remains speculative.

⁴In this section, the term ‘standard marker’ corresponds to Dixon’s (2008) MARK. The ‘comparee marker’ could be equated with Dixon’s INDEX.

This construction is exclusively used for comparisons of superiority. To express comparison of inferiority, one either has to select the antonym of the parameter, or to reformulate with another construction such as that with egressive postpositions (§26.2.4).

The standard marker can follow a genitive postpositional phrase, when the entities being compared are possessives, and the second one is elided, as in (36). The genitive is however optional in this context, as shown by (37), when we find *mbro syz* instead of expected *mbro yuu syz*.

- (36) *uu-rna nuu [mbro yuu] syz puu-wxti.*
 3SG.POSS-ear DEM horse GEN COMP SENS-be.big
 ‘Its ears are bigger than those of the horse.’ (20-tArka, 5)

- (37) *tceri uu-phoŋbu nuu mbro syz koŋla zo puu-wxti.*
 LNK 3SG.POSS-body DEM horse COMP really EMPH SENS-be.big
 ‘Its body is bigger than (that of) a horse.’ (19-rNamoN, 38)

When the standard is not overt, the comparee markers *kuu* (as in 38) or *myzsu* (§26.2.3). obligatory.

- (38) *tuu-yli kuu-dyn uu-stu qandze nuu kuu*
 INDEF.POSS-dung SBJ:PCP-be.many 3SG.POSS-place earthworm DEM ERG
puu-jpum.
 SENS-be.thick
 ‘The earthworms that are in places where there is a lot of dung (fertilizer) are fatter.’ (25-akWzgumba, 128)

The comparee marker *kuu* can occur on the *possessor* of the comparee rather than on the comparee itself, as in (39).

- (39) *azoo kuu a-laz puu-sna*
 1SG ERG 1SG.POSS-karma SENS-be.good
 ‘I am luckier (than you).’ (140515 huli he yelv-zh, 19)

The parameter indexes the comparee, never the standard, as shown in (40), where the main verb has 2SG indexation. The comparee can be relativized like a normal intransitive subject (§23.5.1.2), but the standard cannot (§23.5.12).

- (40) *tyru uu-tcuu nuu syz puu-tuu-rzi!*
 chieftain 3SG.POSS-son DEM COMP SENS-2-be.heavy
 ‘You are heavier than the prince!’ (140506 woju guniang-zh, 134)

36445 The parameter can be combined with exceptive phrases with *ma* ‘apart from’
 36446 (§8.2.8) containing counted nouns, to specify more precisely the difference in
 36447 degree between the two referents as in (40).

- 36448 (41) *wajtein syzny bnu-pyrme ma* *mr-xtei*
 ANTHR COMP [two-years apart.from] NEG-be.small:FACT
 36449 ‘He is only two years younger than Dbangcan.’ (14-siblings, 242)

36450 Comparees and standards are generally nouns, noun phrases or postpositional
 36451 phrases as in the examples above, but can also be temporal adverbs (42) or sub-
 36452 ordinate clauses, in the Irrealis (§21.4.1), or other modal categories as in (43).⁵

- 36453 (42) *jufcur syz jusji kui jnu-mpja*
 yesterday COMP today ERG SENS-be.warm
 36454 ‘Today is warmer than yesterday.’ (elicited)
- 36455 (43) *nui syzny [a-pui-si] kui jnu-mna*
 DEM comp IRR-PFV-die ERG SENS-be.better
 36456 ‘It is better that he dies.’ (150909 xiaocui-zh, 118)

36457 26.2.2 Intensifier *tsa* ‘a little’

36458 The degree adverb *tsa* ‘a little’, one of the very rare adverbs to occur postverbally
 36459 (§22.2.7), can by itself express comparison of superiority as in (44).

- 36460 (44) *kui-mrku cʰu-kui-tuat nui jnu-tcur tsa*
 SBJ:PCP-be.first IPFV-SBJ:PCP-ripen DEM SENS-be.sour a.little
 36461 ‘The one (apple) that ripens earlier is a bit sourer.’ (07-paXCi, 48)

36462 It can be combined with an overt standard marked by either *syz* ‘than’ (45) or
 36463 *stʰuci* ‘as much’ (example 91, §22.2.7).

- 36464 (45) *bmuircui syz jnu-wxti tsa*
 Garrulax COMP SENS-be.big a.little
 36465 ‘It is a bit bigger than the Garrulax sp.’ (23-qapGAmWmtW, 13)

⁵The original Chinese is 还不如死了算了 <hái bùrú sǐ le suànle> ‘It is better if he dies’. The use of the ergative in rectification subordinate clauses (§25.6.1.2) is historically related to this construction (Jacques 2016b).

36466 **26.2.3 The negative verb NEG+*z̥uu* ‘(not) just be’**

36467 The verb *NEG + z̥uu* ‘not just be’, which requires a negative prefix (§13.1.3) serves to
 36468 build another comparative construction. It takes as semi-object the standard, and
 36469 can be followed by the adverb *jamar* ‘about’ and a verb in parataxis specifying
 36470 the parameter of comparison as in (46).

- 36471 (46) *t̥ci u-rdo& mūj-z̥uu jamar p̥ur-wxti*
 36472 barley 3SG.POSS-grain NEG:SENS-just.be about SENS-be.big
 36473 ‘It is a little bigger than a grain of barley.’ (28-kWpAz,104)

36473 It can also be in infinitive form *m̥y-kui-z̥uu* as a manner converb (§16.2.1.7, §25.4.2)
 36474 as in (47).

- 36475 (47) *u-ru n̥ura tur-jabndzu m̥y-kui-z̥uu zo*
 36476 3SG.POSS-stalk DEM:PL INDEF.POSS-finger NEG-INF:STAT-just.be EMPH
 36477 *p̥u-jpum cʰa*
 36478 IPFV-be.thick can:FACT
 36479 ‘Its stalk can grow thicker than a finger.’ (12-ndZiNgri, 5)

36478 The stative verb expressing the parameter can be combined with modal verbs
 36479 as in (47). Without an overt parameter, the default interpretation of the verb
 36480 *m̥y-z̥uu* means ‘not just like that’ or ‘bigger than’. In (48) for instance, *m̥y-z̥uu* is
 36481 redundantly followed by a comparative construction in *s̥yz* (§26.2.1), and the two
 36482 clauses *βz̥uu nd̥yre m̥y-z̥uu* and *βz̥uu s̥yz nd̥yre wxti nyu* have the same meaning.

- 36483 (48) *n̥unuu kui-xt̥cur~xt̥ci ci tce, βz̥uu nd̥yre*
 36484 DEM SBJ:PCP-EMPH~be.small INDEF LNK mouse ADVERS
 36485 *m̥y-z̥uu. βz̥uu s̥yz nd̥yre wxti nyu*
 36486 NEG-just.be:FACT mouse COMP ADVERS be.big:FACT be:FACT
 36487 ‘(The weasel) is a small (animal), but bigger than a mouse. It is bigger
 36488 than a mouse.’ (27-spjaNkW, 32)

36487 In this construction, *m̥y-z̥uu* indexes as subject the comparee, as in (49).

- 36488 (49) *ki kum ki m̥y-z̥uu-a*
 36489 DEM.PROX door DEM.PROX NEG-just.be:FACT-1SG
 36490 ‘I am bigger than this door.’ (elicited)

36490 Alternatively, *m̥y-z̥uu* can be combined with a degree nominal (§26.1.2.1) as in
 36491 (50), in which case it only occurs in the 3SG.

- 36492 (50) *a-tuu-mbro* *ki* *kum ki* *my-zuu.*
 1SG.POSS-NMLZ:DEG-be.high DEM.PROX door DEM.PROX NEG-just.be:FACT
 36493 ‘I am bigger than this door.’ (elicited)

36494 The non-past form *my-zuu* has been further grammaticalized as a degree adverb
 36495 *myzuu* ‘even more’, which can be combined with the standard marker *syz*, as in
 36496 (51). This construction indicates that the standard already has a very high degree
 36497 relative to the parameter, and that the comparee’s degree is even higher.

- 36498 (51) *qamtcur nuu uu-mtc^{hi}* *nunuu βzuu* *syzny myzuu* *zo*
 shrew DEM 3SG.POSS-mouth DEM mouse COMP even.more EMPH
 36499 *amtcoꝝ*
 be.pointy:FACT
 36500 ‘The mouth of the shrew is even more pointy than that of the mouse.’
 36501 (27-spjaNkW, 204)

36502 26.2.4 The egressive postposition *cantax* ‘up from’

36503 The egressive postpositions (§8.2.10), in particular *cantax* ‘up from’, can be com-
 36504 bined with a verb (or a complex predicate) in negative form, meaning ‘no more
 36505 than X’, where the standard X is the noun phrase preceding *cantax* as in (52) and
 36506 (53).

- 36507 (52) *[tuu-tya cantax] my-zri.*
 one-span up.from NEG-be.long:FACT
 36508 ‘It is not longer than one handspan.’ (28-tshAwAre, 51)
- 36509 (53) *uu-ru ra (...), [tuu-jabndzu cantax] juu-jpum*
 3SG.POSS-stalk PL GENR.POSS-finger up.from IPFV-be.thick
 36510 *my-c^{ha} ma*
 NEG-can:FACT LNK
 36511 ‘Its stalk cannot grow/become thicker than a finger.’ (15-babW, 23)

36512 The egressive *cantax* also occurs in one of the superlative constructions (§26.4.3).

36513 26.2.5 Negative existential verbs

36514 The negative existential verb *me* (§22.5.1.2), combined with the scalar focus marker
 36515 *kunr* ‘even’ (§9.1.6.1), can have the meaning ‘not even as big as X’, as in (54),
 36516 where the noun *zruy* ‘louse’ is the standard of comparison.

- 36517 (54) *qajuβlama ky-ti ci tu tce, nur rca*
 bug OBJ:PCP-say INDEF exist:FACT LNK DEM UNEXP:FOC
 36518 *kui-xtcu~xtci ci zo cti. zruuy kumy*
 SBJ:PCP-EMPH~be.small INDEF EMPH be.AFF:FACT louse also
 36519 *me.*
 not.exist:FACT
 36520 ‘There is an (insect) called *qajuβlama*, it is very small. It is not even as big
 36521 as a louse.’ (28-kWpAz, 149-150)

36522 Another example of this construction is found in (71) in (§8.2.3.1).

36523 26.3 Equative and similitive

36524 26.3.1 Entity equative

36525 This section discusses entity equative constructions, which express that two en-
 36526 tities have a property in equal degree (‘X is as Y as Z’; Haspelmath & Buchholz
 36527 1998). No less than five constructions are available to express this meaning.

36528 26.3.1.1 Nominalized equative construction

36529 The nominalized entity equative construction is a particular case of the degree
 36530 nominal construction (§26.1.2.1), with *naxt̪uy* ‘be the same’ as degree predicate.
 36531 It has three subvariants.

36532 In the first variant (corresponding to Haspelmath’s (2017) type 5 – Primary
 36533 reach equative unified), the comparee and the standard are included in a noun
 36534 phrase, with the comitative marker *cʰo* (and its longer variant *cʰond̪re*, §8.2.5)
 36535 serving as the standard marker, as in (55).

- 36536 (55) *qalekuutsʰi nuunu cʰond̪re βzar ni ndzi-tur-wxti*
 bird.sp DEM COMIT buzzard DU 3DU.POSS-NMLZ:DEG-be.big
 36537 COMPAREE STANDARD.MARKER STANDARD PARAMETER
naxt̪uy.
 be.identical:FACT
 PARAMETER.MARKER
 36538 ‘The *qalekuutsʰi* bird is as big as the buzzard.’ (literally: ‘The *qalekuutsʰi* bird
 36539 and the buzzard are identical in their degree of bigness.’) (23-RmWrcWftsa,
 36540 34)

36541 The degree noun can be in dual/plural as in (55) and (57), corresponding to the
 36542 sum of the numbers of the comparee and the standard, or in the singular as in
 36543 (56): even though two referents are present here, the 3SG possessive *u-* is used,
 36544 coreferent with the comparee.

- 36545 (56) *qro nunuu duduit c^ho u-tuu-wxti naχtcuy.*
 36546 pigeon DEM dove COMIT 3SG.POSS-NMLZ:DEG-be.big be.the.same:FACT
 'The pigeon is as big as a dove.' (24-qro, 2)

36547 These two possibilities are in free variation: example (57), from the same text
 36548 as (56) and referring to the same situation, has dual marking.

- 36549 (57) *tce duduit c^ho ndzi-tuu-wxti naχtcuy zo*
 36550 LNK dove COMIT 3DU.POSS-NMLZ:DEG-be.big be.the.same:FACT EMPH
 'It is as big as a dove.' (24-qro, 19)

36551 In the second variant, the nominalized parameter takes a possessive prefix only
 36552 coreferent with the comparee, and the standard together with the comitative (the
 36553 standard marker) follows the parameter, as in (58).

- 36554 (58) *qalias nuu u-tuu-wxti nuu qandzyi c^ho*
 36555 eagle DEM 3SG.POSS-NMLZ:DEG-be.big DEM hawk COMIT
 COMPAREE PARAMETER STANDARD STANDARD.MARKER
naχtcuy tsa
 36556 be.identical:FACT a.little
 PARAMETER.MARKER PARAMETER.MARKER
 'The eagle is about as big as the hawk.' (19-qandZGi, 36)

36557 In the third variant, the parameter takes a third person singular possessive
 36558 prefix, and the comparee and standard are marked by person indexation on the
 36559 verb. In (59), the standard and the comparee are the speaker and the addressee;
 36560 they are not expressed by overt pronouns, but are rather indexed on the verb by
 36561 the 1DU suffix *-tci*.

- 36562 (59) *tce u-tuu-muictas nuu-naχtcuy-tci*
 36563 LNK 3SG.POSS-NMLZ:DEG-be.cold SENS-be.identical-1DU
 PARAMETER PARAMETER.MARKER-COMPAREE+STANDARD
tce, q^he nuu-txjpa nuu-rkun ma
 LNK LNK 2PL.POSS-SNOW SENS-be.few SFR

36564 'It is as cold here as it is in your place, you don't have a lot of snow.' ('You
 36565 and I are identical as to coldness'; conversation, 2014/11)

26.3.1.2 Serial verb constructions

Serial verb constructions with the similitative verb *fse* ‘be like’ (§25.4.1.2), or more rarely *naχtəuy* ‘be identical’ and *aqsuja* ‘be of the same size’ as first verb can also be used a entity equative.⁶

The semi-transitive verb *fse* ‘be like’ (§14.2.3) takes the comparee as subject and the standard as semi-object. Since it is syntactically linked to the standard, it is analyzed here as the standard marker rather than as the parameter marker.

36566	(60)	<i>nuu</i>	<i>li</i>	<i>u-wa</i>	<i>fsufse</i>	<i>zo</i>	<i>pjy-fse</i>
		DEM		again 3SG.POSS-father	completely.like	EMPH IFR.IPFV-be.like	
		COMPAREE		STANDARD	PARAMETER.MARKER		STANDARD.MARKER
36567		<i>pjy-syjlob</i>					
		IFR.IPFV-be.ugly					
		PARAMETER					

‘(The frog son) was as ugly as his father.’ (150818 muzhi guniang-zh, 100)

The reduplicated degree adverb *fsufse* ‘completely identical’ which derives from *fse* ‘be like’ optionally occurs in this construction as a parameter marker.

36568	(61)	<i>u-qə</i>	<i>nura</i>	<i>li</i>	<i>kumab tṣjm̥y</i>	<i>nura</i>	
		3SG.POSS-root	DEM:PL	again other	mushroom	DEM:PL	
36569		<i>fsufse</i>		<i>zo</i>	<i>fse</i>		
		completely.identical		EMPH	be.like:FACT		
36570		‘Its root is completely identical to that of other mushrooms.’					
36571		(23-mbrAZim, 115)					

Both *fse* ‘be like’ and the stative verb occurring with it in the serial construction (the parameter) are in participial form in (62), forming a relative clause with the comparee as the relativized element. The superlative construction studied in §26.4.3 is essentially a particular use of such relativized equative sentences.

36572	(62)	<i>azə</i>	<i>kui-fse</i>	<i>kui-ycʰuacʰa</i>	<i>zo</i>	<i>uʔuŋuu</i>	<i>yurza</i>
		1SG	SBJ:PCP-be.like	SBJ:PCP-be.capable	EMPH	young.man hundred	
		STANDARD	STANDARD.MARKER	PARAMETER			COMPAREE
36573		<i>kurcat ra</i>					
		eight	be.needed:FACT				

⁶These constructions correspond to Haspelmath’s (2017) type 1 (Only equative standard-marker).

36588 'I need a hundred and eight young men as able as I am.' (Norbzang 2012,
 36589 17)

36590 The verb *naxtciuy* 'be the same' requires in addition the comitative *c^ho* on the
 36591 standard (as in the preceding construction, §26.3.1.1), as shown by (63).

36592	(63) < <i>bali></i>	<i>nui, kukutcu izora</i>	<i>c^ho</i>	<i>naxtciuy</i>
	TOPO	DEM here	1PL	COMIT
	COMPAREE	STANDARD	STANDARD.MARKER	STANDARD.MARKER
36593	<i>jamar</i>	<i>nui-muictar^b nui-tui-ti tce</i>		PARAMETER.PARAMETER
	about	SENS-be.cold	SENS-2-say	
		PARAMETER	LNK	

36594 'You said that it was as cold in Paris as here by us.' (conversation, 11-08-
 36595 2016)

36596 26.3.1.3 Possessed noun

36597 The inalienably possessed noun *wi-fsu* 'equal in size to' (§5.1.1.5, §20.8.2) can be
 36598 used as standard marker, as in (64) and (65). The possessive prefix is coreferent
 36599 with the standard; when the standard is the generic noun *turme* 'person', the
 36600 prefix can either be in 3SG as in (64), or with the generic possessor prefix (§6.2.2).

36601	(64) <i>tu-mbro tce, turme wi-fsu</i>	<i>jamar tu-βze</i>
	IPFV-be.high LNK man	3SG.POSS-equal.in.size about IPFV-grow
36602	<i>c^ha.</i>	can:FACT

36603 'When it grows, it can grow about the size of a person.' (12-ndZiNgri, 4)

36604	(65) <i>wi-tui-mbro</i>	<i>nui tui-mt^bYY</i>	<i>wi-fsu</i>
	3SG.POSS-NMLZ:DEG-be.high	DEM GENR.POSS-waist	3SG.POSS-equal.in.size
36605	<i>jamar ma</i>	<i>tu-mbro</i>	<i>mx-c^ha</i>
	about apart.from	IPFV-be.high	NEG-can:FACT
36606	'As for its size, it can grow only about as high as a person's waist.'		
36607	(18-NGolo, 181)		

36608 The parameter is optional in this construction. It can be expressed either as a
 36609 coordinated clause as in (64), as a degree nominal or as the main predicate as in
 36610 (65). Only *mbro* 'be high' and *wxti* 'be big' are compatible with *wi-fsu*.

36611 A similar construction is reported in Situ (Lín 1993: 377).

36612 26.3.1.4 *st^huci* ‘as much’ and *jamar* ‘about’

36613 The adverbs *st^huci* ‘so much’ (on its etymology, see §5.8.4) and *jamar* ‘about’ (from
 36614 Tibetan ལྷར་མར་ *jar.mar* ‘about’) are used as standard marker. The former one *st^huci*
 36615 essentially occurs in a negative equative construction ‘not as X as Y’ (where X
 36616 is the parameter and Y the standard) as in (66).

- 36617 (66) *kumcku uu-jwab st^huci my-rjum*
 garlic 3SG.POSS-leaf so.much NEG-be.broad
 36618 ‘(Its leaves) are not as broad as garlic leaves.’ (07-Cku, 91)

36619 The latter one *jamar* ‘about’ can be combined with either adjectival stative
 36620 verbs such as *wxti* ‘be big’ (67), or with existential verbs (§22.5.1.2) as in (68).

- 36621 (67) *qajdo snuaz jamar wxti*
 crow two about be.big:FACT
 36622 ‘It is about as big as two crows.’ (19-qandZGi, 9)

- 36623 (68) *uu-mat yuu uu-ru nuu zri tce, tce tuu-tya*
 3SG.POSS-fruit GEN 3SG.POSS-stalk DEM be.long:FACT LNK LNK one-span
 36624 *jamar, ki jamar tu tce*
 about DEM.PROX about exist:FACT LNK
 36625 ‘The stalk of its fruit is long, about a handspan long, about this long.’
 36626 (16-CWrNgo, 224)

36627 26.3.2 Property equative

36628 Property equative constructions (‘ X_i is as Y as he/she/it_i is Z ’), in which two
 36629 parameters (comparee parameter Y and standard parameter Z), rather than two
 36630 entities, are compared, are not attested in the Japhug corpus. In Jacques (2018d),
 36631 I used Perrault’s fairy tale *Riquet à la Houppe*, whose whole plot is based on
 36632 property equative sentences, as a way to conduct elicitation on this topic.

36633 Property equatives, e.g. ‘ X_i is as stupid as s/he_i is beautiful’ (a sentence oc-
 36634 curring several times in the story), can be expressed in Japhug in three different
 36635 ways.

36636 First, the standard parameter is in degree nominal form, followed by the pos-
 36637 sessed noun *uu-fsu* ‘equal in size to’ (§26.3.1.3), and the comparee parameter is the
 36638 main predicate of the construction, in finite form (69).

- 36639 (69) *w-tuu-mpcyr* *yuu* *w-fsu* *jamar ci*
 3SG.POSS-NMLZ:DEG-be.beautiful GEN 3SG.POSS-equal.in.size about INDEF
 36640 *nui-k^he* *cti*
 SENS-be.stupid be.AFF:FACT
 36641 ‘S/he_i is stupid to the extent of his/her_i beauty.’ (elicited)

36642 Second, the two verbs used as parameters are in degree nominal form, linked
 36643 by the comitative postposition *c^ho*, and serve as subject of the verb *afsuja* ‘be of
 36644 the same size’ (70).

- 36645 (70) *w-tuu-mpcyr* *c^ho* *w-tuu-k^he*
 3SG.POSS-NMLZ:DEG-be.beautiful COMIT 3SG.POSS-NMLZ:DEG-be.stupid
 36646 *nui* *nui-yfsuja* *cti*
 DEM SENS-be.of.the.same.size be.AFF:FACT
 36647 ‘His/her beauty and his/her stupidity are equal.’ (elicited)

36648 Third, it is possible to express the same meaning with a correlative construc-
 36649 tion, as in (71), though this may be a calque from Chinese.

- 36650 (71) *tc^hi* *jamar kuu-mpcyr* *nui*, *nui* *jamar ci* *nui-k^he*
 what about SBJ:PCP-be.beautiful DEM DEM about INDEF SENS-be.stupid
 36651 *cti*
 be.AFF:FACT
 36652 ‘A much as s/he is beautiful, s/he is stupid.’ (elicited)

36653 26.3.3 Similative

36654 Similative constructions express similarity in the manner in which an action is
 36655 performed, rather than equal degree.

36656 26.3.3.1 Similative verbs

36657 The main similative construction involves the similative verbs *fse* ‘be like’ or *stu*
 36658 ‘do like’ in parataxis as in (72).

- 36659 (72) *nunuu pri* *nui* *kuu*, *nyki*, *turme pur-fse* *tce*, *nykinuu icq^ha* *nui*,
 36660 DEM bear DEM ERG FILLER man SENS-be.like LNK FILLER FILLER DEM
ts-ryku *tci* *tu-ndze*, *ca* *tci* *tu-ndze*, (...)
 36661 INDEF.POSS-crops also IPFV-eat meat also IPFV-eat
nui-ŋgryl.
 SENS-be.usually.the.case
 36662 ‘The bear, like a man, eats grains and meat.’ (21-pri, 17)

26 Degree and comparison

36663 Alternatively, the infinitive *ku-fse* of *fse* ‘be like’ as a manner converb (§16.2.1.7,
36664 §25.4.2) can convey similitative meaning, either with a noun phrase or an infinitive
36665 clause (73).

- 36666 (73) [ky-*ynuwyro*] *ku-fse* *tú-wy-ndza cti* *ma*
INF-play INF:STAT-be.like IPFV-INV-eat be.AFF:FACT LNK
36667 ‘People eat it for fun (as if to play, not as part of a real meal).’ (08-rasti, 59)

36668 26.3.3.2 Similitative denominal stative verbs

36669 The denominal prefix *aru-/yrui-* derives stative verbs meaning ‘be X-like’ out of
36670 nouns (§20.2.2), as in (74), an example in degree nominal form (§16.3.3) sponta-
36671 neously produced by Tshendzin as comment on a story that we were transcrib-
36672 ing.

- 36673 (74) *wu-tuu-yrui-sujno* *nui!*
3SG.POSS-NMLZ:DEG-DENOM:SIMILATIVE-grass SFP
36674 ‘(The princess cuts their head as easily/casually) as if it were grass.’
36675 (heard in context)

36676 The more elaborated sentence (75) was given as an explanation for (74).

- 36677 (75) *ky-p^hut wu-tuu-mbat* *kua*
INF-cut 3SG.POSS-NMLZ:DEG-DENOM:SIMILATIVE-easy ERG
36678 *nui-yrui-sujno zo*
SENS-be.like.grass EMPH
36679 ‘It is as easy to cut as if it were grass.’ (elicited)

36680 In this construction, the standard is the verbalized noun, the comparee is the
36681 intransitive subject, and the denominal prefix *aru-/yrui-* is the standard marker.
36682 The parameter can be optionally indicated as a degree nominal as in (75).

36683 This unusual similitative construction is productive, since it can be applied to
36684 nouns from Tibetan or Chinese. It does not fit in any of Haspelmath’s (2017) six
36685 types of equative constructions, but bears some resemblance to the “similitative
36686 adjective” derivation in *-lágán* in Saami (Ylikovski 2017: 5.1).

36687 26.4 Superlative

36688 26.4.1 Degree adverb

36689 The superlative adverb *stu* ‘most’ is generally located before the verb, and option-
36690 ally takes the emphatic *zo*. It most commonly expresses absolute superlative as

36691 in (76).

- 36692 (76) *n_Yzo stu zo tuu-mk^hyz tce, tce n_Yzo c-t_Y-nyme*
 2SG most EMPH 2-be.expert:FACT LNK LNK 2SG TRAL-IMP-do[III]
 36693 ‘You are the best at it, do it!’ (150822 laoye zuoshi zongshi duide-zh, 37)

36694 When the subject has a certain property in the highest degree only relative to
 36695 a certain class (relative superlative), this class can be specified with the relator
 36696 noun *w-ŋguuz* ‘among’ (§8.3.4.5), as in (77).

- 36697 (77) *nui pyrtciu nui-ŋguuz stu xtci low.*
 36698 DEM bird 3PL.POSS-among most be.small:FACT SFP
 ‘It is the smallest of all birds.’ (24-ZmbrWpGa, 126)

36699 Most examples of this construction appear with subject participle (§16.1.1) of
 36700 adjectival stative verbs as in (78), and object participles (§16.1.2) with transitive
 36701 experiencer verbs as in (79).

- 36702 (78) *kuucunguu tce <aizheng> ky-ti pui-me tce,*
 long.ago LNK cancer OBJ:PCP-say PST.IPFV-not.exist LNK
 36703 *ky-kui-nyndza nui stu zo kui-ŋyn*
 AOR-SBJ:PCP-have.leprosy DEM most EMPH SBJ:PCP-be.evil
 36704 *ky-pa pui-ŋu.*
 OBJ:PCP-consider PST.IPFV-be
 36705 ‘In former times, nobody talked about cancer, and leprosy was considered
 36706 to be the most terrible (of all diseases).’ (25-khArWm, 35)

- 36707 (79) *tce tuu-ci w-rkui tu-łor tce, nui stu*
 LNK INDEF.POSS-water 3SG.POSS-side IPFV-come.out LNK DEM most
 36708 *w-ky-nui-rga ŋu tce*
 3SG.POSS-APPL-like be:FACT LNK
 36709 ‘It grows near the water, it is what it likes the most.’ (09-mi, 6)

36710 The superlative adverb is also attested with transitive dynamic verbs of action,
 36711 as in the pseudo-cleft construction (§23.6.1) in (80).⁷

⁷The phrase *tr-rme kuu-fse* ‘like hair’ is incomplete; the correct way to express the meaning ‘clothes made of animal hair’ is the head-internal relative clause *tr-rme kuu tuu-ŋga t^huu-ky-βzu* (see 40, §23.4.3).

26 Degree and comparison

- 36712 (80) [stu zo u-kv-ndza] *nunuu tui-ŋga,*
most EMPH 3SG.POSS-OBJ:PCP-eat DEM INDEF.POSS-clothes
36713 *tr-rme* *kui-fse,* *tui-ŋga* *nura ŋu.*
INDEF.POSS-hair SBJ:PCP-be.like INDEF.POSS-clothes DEM:PL be:FACT
36714 ‘What it eats most is clothes, clothes (made of animal fur).’ (28-kWpAz, 79)

36715 Oblique participles (§16.1.3) are also compatible with the superlative adverb,
36716 as shown in (81).

- 36717 (81) [stu u-sy-dyn] *nui stymku nura ŋu-nui.*
most 3SG.POSS-OBL:PCP-be.many DEM grassland DEM:PL be:FACT-PL
36718 ‘The place where it is most numerous is the grasslands.’ (19-qachGa
36719 mWntoR, 24-25)

36720 26.4.2 Possessed participle

36721 Another possibility to express superlative meaning is with a stative verb in sub-
36722 ject participial form with a third plural possessive marker (§16.1.1.1), as in (82),
36723 where the headless participial relative in square brackets, literally meaning ‘the
36724 beautiful one (among/of) all birds’ is to be understood as ‘the most beautiful of
36725 all birds.’

- 36726 (82) *tce [pya t^hamt₃y₂t yui nui-kui-mpcyr]* *nui rmvβja*
LNK bird all GEN 3PL.POSS-SBJ:PCP-be.beautiful DEM peacock
36727 *nui-ŋu.*
SENS-be
36728 ‘The peacock is the most beautiful of all birds.’ (24-ZmbrWpGa, 84)

36729 This construction is only attested with *mpcyr* ‘be beautiful’ and *mna* ‘be better’.

36730 26.4.3 Negative existential

36731 Another way of expressing superlative meaning in Japhug is by means of a nega-
36732 tive existential verb (§13.1.2, §22.5.4) combined with a participial relative of *fse* ‘be
36733 like’, as in (83). This construction is a particular use of the equative construction
36734 described in §26.3.1.2.

- 36735 (83) *ama, a-pi k^hu nu tc^hindža ku-tur-nyp^hupphyo tce*
 SURPRISE 1SG.POSS-elder.sibling tiger DEM why PRS-2-DISTR:flee LNK
 36736 *[nyzo kur-fse] kui-sry-mu me*
 2SG SBJ:PCP-be.like SBJ:PCP-PROP-fear not.exist:FACT
 36737 'Brother tiger, why are you running away like that, you are the most
 36738 dreadful (animal).' (literally: 'There is no one dreadful like you') (2005
 36739 khu, 25)

36740 This construction is potentially ambiguous: the clause *X kui-fse kui-sry-mu me*
 36741 can be interpreted as meaning either 'X is the most dreadful thing' or 'there is
 36742 nothing dreadful that is like X'.

36743 It is possible in some cases to use orientation preverbs to disambiguate be-
 36744 tween these two meanings. In example (84),⁸ the verbs *tso* 'understand' and *suz*
 36745 'know' in the superlative construction take the *upwards* prefix *tu-* instead of the
 36746 expected EASTWARDS (*ku-tso-a* IPFV-understand-1SG) and DOWNWARDS (*pju-suz-a*
 36747 IPFV-know-1SG) prefixes that they normally select.

- 36748 (84) *azō [nu kui-fse] zo maka tu-tso-a*
 1SG DEM SBJ:PCP-be.like EMPH at.all IPFV:UP-understand-1SG
 36749 *me, tu-suz-a me*
 not.exist:FACT IPFV:UP-know-1SG not.exist:FACT
 36750 'This is what I know best.' (literally: 'There is nothing that I understand,
 36751 that I know like that.' 140519 yeying, 62)

36752 With the UPWARDS prefix *tu-* as in (84), only the superlative interpretation is
 36753 possible, while with the DOWNWARDS prefix *pju-* as in (85) the superlative inter-
 36754 pretation is excluded, and only the negative existential one is found.

- 36755 (85) *azō [nu kui-fse pju-suz-a] me*
 1SG DEM SBJ:PCP-be.like IPFV:DOWN-know-1SG not.exist:FACT
 36756 'I know of no such thing.' (elicited)

36757 I interpret this difference as a matter of semantic scope. In (84), the clause *nu*
 36758 *kui-fse* 'like that' is outside of the scope of the negation, and the negation applies

⁸Example (84) is translated from 夜莺, 我再熟悉不过了 <yèyǐng, wǒ zài shúxí bùguòle> 'The nightingale, I am quite familiar with it', with the with the construction 再……不过zài ... bùguò involving a negated surpass comparative, and the negative existential verb here is possibly a case of calque. However, Chinese influence cannot be a factor in the use of orientation preverbs in (84) and (85).

36759 to the minimal relative clauses *tu-tso-a* ‘(that) I understand’ (§23.5.4.1) and *tu-suza*
 36760 *a* ‘(that) I know’ (§23.5.3.1) exclusively.

36761 With the DOWNWARDS prefix *pju-* on *suz* ‘know’ as in (85), the scope of the
 36762 negation is different: it applies to the whole constituent indicated between square
 36763 brackets (‘there is nothing like that that I know’).

36764 This contrast cannot however be generalized to all verbs; more research is
 36765 necessary to ascertain the extent and the functional explanation for this puzzling
 36766 phenomenon.

36767 Instead of *kui-fse*, egressive postpositions such as *caytaš* ‘up from’ (§8.2.10,
 36768 §26.2.4) can also be used in a superlative construction as in (86).

- 36769 (86) *azō caytaš kui-cʰa kui-rkaŋ me*
 1SG up.from SBJ:PCP-can SBJ:PCP-robust not.exist:FACT
 36770 ‘I am the most able one, the most robust one.’ (literally: ‘There is no one
 36771 that is more robust/able than me’) (140425 shizi huli he lu-zh, 28)

36772

27 Kinship

36773

27.1 Introduction

36774 Kinship terms (§5.1.2.4) in Japhug are all inalienably possessed nouns (§5.1.2),
 36775 and are presented in this section in their indefinite possessor form (§5.1.3), which
 36776 generally also serves as the citation form.

36777 This section not concerned with the morphosyntactic properties of these nouns
 36778 (which is treated in §5.1.3), but rather with the semantic structure of the system.

36779 The meanings of the terms is described using the abbreviations presented in
 36780 Table 27.1, which, combined with each other (for instance MB and eZ represent
 36781 ‘mother’s brother’ and ‘elder sister’, respectively), offer a concise way to repre-
 36782 sent the possible parameters relevant to the description of kinship terms (Kroeber
 36783 1909).

Table 27.1: Standard abbreviations used to describe kinship terms

F	Father	M	Mother		
B	Brother	Z	Sister		
S	Son	D	Daughter	Ch	Child
H	Husband	W	Wife		
♂	Male possessor	♀	Female possessor		
e/+	Elder	y/-	Younger		

36784 The term ‘male/female possessor’ corresponds to what Kroeber (1909: 78–79)
 36785 calls ‘sex of the person through whom the relationship exists’ or ‘sex of the con-
 36786 necting relative’, encoded as inalienable possessor in Japhug. For instance, *tr-
 36787 snom* ‘sister’ ([♂]Z) is only used with reference to the sister of a male (§27.2.2.1).

36788 Kinship terms can be divided into self-reciprocal terms, in which both mem-
 36789 ber of the relationship use the same term to refer to each other (from instance
 36790 *tr-mytsa* ‘mother’s sister’s child’ MZCh, §27.2.3.1), and non-self-reciprocal ones,
 36791 which usually have to be described in reciprocal pairs.

To determine the reciprocal term, one applies to each symbol in the formula the equivalences in Table 27.2, starting from the end. Special care should be given to the sex of the connecting relative.

For instance, the reciprocal of MB is obtained by combining ($\delta B|\delta Z$) with ($\delta S|\delta D$): of the two options of ($\delta B|\delta Z$), the second one δZ is selected because the following element $\delta(S|D)$ has a female connecting relative, hence $\delta Z(S|D)$, equivalent to δZCh .

Table 27.2: Reciprocal terms

	Reciprocal		
	neutral	δ	φ
F	δCh	δS	δD
M	φCh	φS	φD
B		δB	δZ
Z		φB	φZ
S		δF	δM
D		φF	φM
Ch		F	M
W		φH	
H		δW	

This procedure is useful to calculate the reciprocal of more complex configurations. For instance, the reciprocal of FFBDS can be obtained in the following way:

- ($\delta F|\delta M$) + ($\varphi F|\varphi M$) + ($\delta B|\delta Z$) + ($\delta S|\delta D$) + ($\delta S|\delta D$)
- $\delta(F|M)\varphi + (F|M)\delta + (B|Z)\delta + (S|D)\delta + (S|D)$
- $\delta MFBS(S|D)$
- $\delta MFBSCh$

It makes it possible to easily recheck which configurations are intrinsically self-reciprocal, for instance maternal parallel cousins MZCh:

- ($F|M$) + ($\varphi B|\varphi Z$) + (φCh)

36809 • (F|M)[♀]+(B|Z)[♀]+Ch

36810 • MZCh

36811 Japhug lacks a specific vocative form of kinship terms (§5.3.1), unlike Tshob-
 36812 dun, Sun (1998: 133) for instance, and there are only few differences terms of
 36813 address and terms of reference.

36814 Given the important changes in the Gyalrong society since the 1950s, and in
 36815 particular the fact that all speakers of Japhug are now bilingual in Chinese, it is
 36816 not surprising that the kinship system is undergoing considerable reshaping. The
 36817 aim of this chapter is to document use of the kinship terms both by contemporary
 36818 younger speakers, and the system as it used to be in the traditional society, before
 36819 massive Chinese influence.

36820 The data in this chapter is mainly on Tshendzin's explanations of the use of the
 36821 system in a text from the corpus (140425 kWmdza), but also draws on observation
 36822 of the actual use of kinship terms in conversations.

36823 27.2 Kinship terms by generations

36824 This section is an overview of the uses of all kinship terms, first EGO's parents,
 36825 their siblings and their parents (§27.2.1), then EGO's siblings (§27.2.2), EGO's cousins
 36826 (§27.2.3) and finally EGO, EGO's siblings and EGO's cousins's children and grand-
 36827 children (§27.2.4). It also includes information on affines, though the terminology
 36828 is considerably poorer than for consanguines.

36829 27.2.1 Ascending generations

36830 27.2.1.1 EGO's parents

36831 Two series of terms are in use for EGO's parents, the common terms *tr-mu* 'mother'
 36832 and *tr-wa* 'father', and the honorific ones, borrowed from Tibetan *tr-pa* 'father'
 36833 and *tr-ma* 'mother'. The terms for 'mother' and 'father' can be combined without
 36834 any linker with a collective meaning 'parent', but the order is rigidly 'mother'
 36835 followed by 'father' (1)¹ in the case of the native terms, and the opposite in the
 36836 case of the honorific ones (*a-pa a-ma* 'my parents'), as is discussed in more detail
 36837 in §9.2.2.2.

¹The opposite order *†nṛ-wa nṛ-mu* is ungrammatical.

- 36838 (1) *ny-mu* *ny-wa* *ni*
 2SG.POSS-mother 2SG.POSS-father DU
 36839 ‘Your parents.’ (many occurrences)

36840 The native terms *tx-mu* and *tx-wa* can be alienabilized (§5.1.2.9) and become
 36841 terms of reference for elder people as in (2).

- 36842 (2) *kʰa* *tu-βyri* *kui-nybaš* *tx-mu*
 house 3SG.POSS-before SBJ:PCP-have.a.good.time INDEF.POSS-mother
 36843 *nura* *kui nu-syz-numbjum* *smi cʰui-nui-βlui-nui*
 DEM:PL ERG 3PL.POSS-OBL:PCP-warm.by.fire fire IPFV-AUTO-burn-PL
 36844 *pjy-ŋu*
 IFR.IPFV-be
 36845 ‘Old women who were resting in front of the house were burning a fire to
 36846 keep themselves warm.’ (2002 qaCpa, 227)

36847 27.2.1.2 EGO’s parent’s siblings

36848 There are different terms for parallel and cross-uncles and aunts (Table 27.3),
 36849 which are all native terms with cognates in Tangut (Jacques 2012e) except possibly
 36850 for *tx-ni* ‘father’s sister’, which is borrowed from Tibetan ཡང་ ཡa.ne ‘paternal
 36851 aunt’.

Table 27.3: Terms for EGO’s parents’s siblings and their spouses

Uncle/Aunt	Spouse
MB (cross-uncle) <i>tx-rpuu</i>	MBW <i>tx-łas</i>
MZ (parallel aunt) <i>tx-łas</i>	MZH <i>tx-βyo</i>
FB (parallel uncle) <i>tx-βyo</i>	FBW <i>tx-łas</i>
FZ (cross-aunt) <i>tx-ni</i>	FZH <i>tx-βyo</i>

36852 The terms for parallel aunts and uncles also serve to designate parent’s sib-
 36853 bings’s spouses, as described in (3). Note in this excerpt the use of the autive
 36854 *nu-* on *tu-ku-nu-ti* ‘one calls (them)’ reflecting the ‘casual’ spontaneous function
 36855 (§19.1.4), emphasizing the fact that no specific term exists (compare with 28 in
 36856 §19.1.4).

- 36857 (3) *tu-nji* *wi-nmab* *c^hondyre tuu-lab*
 GENR.POSS-FZ 3SG.POSS-husband COMIT GENR.POSS-MZ
 36858 *wi-nmab* *ra nuu-cki* *tce tce li* “*a-βyo*”
 3SG.POSS-husband PL 3PL.POSS-DAT LNK LNK again 1SG.POSS-FB
 36859 *tu-kui-nuu-ti* *cti* *ma nuu ma* *zaka*
 IPFV-GENR-AUTO-say be.AFF:FACT LNK DEM apart.from each
 36860 *wi-rmi* *me.* (...) *tuu-rpuu* *yuu wi-rzaβ*
 3SG.POSS-name not.exist:FACT GENR.POSS-MB GEN 3SG.POSS-wife
 36861 *wi-cki* *tce “a-łab”* *tu-kui-ti* *ŋu.*
 3SG.POSS-DAT LNK 1SG.POSS-MZ IPFV-GENR-AUTO-say be:FACT
 36862 *tuu-βyo* *yuu wi-rzaβ* *wi-cki* *li* “*a-łab*”
 GENR.POSS-FB GEN 3SG.POSS-wife 3SG.POSS-DAT again 1SG.POSS-MZ
 36863 *tu-kui-ti* *cti.*
 IPFV-GENR-AUTO-say be.AFF:FACT
 36864 ‘One calls one’s father’s sister’s and one’s mother’s sister’s husbands
 36865 *a-βyo* ‘my father’s brother’, apart from that they don’t have their own
 36866 term. One calls one’s mother’s brother’s and one’s father’s brother’s
 36867 wives *a-łab* ‘my mother’s sister’. (140425 kWmdza05, 1)

36868 They can be used as polite address terms for elder people (§5.3.3). In addition,
 36869 *tr-βyo* is also a term of address for lamas, expressing respect.

36870 The mother’s siblings term *tr-rpuu* ‘mother’s brother’ and *tr-łab* ‘mother’s sis-
 36871 ter’ can also designate their children (the maternal cross-cousins, §27.2.3.2) and
 36872 their grandchildren (§27.5).

36873 Conversely, the reciprocal of *tr-rpuu* ‘mother’s brother’, the term *tr-ftsa* ‘nephew’
 36874 (§27.2.4.2), can be applied to EGO’s paternal grandfather’s sisters’ children (FFZCh),
 36875 who belong to EGO’s parent’s generation, due to the same generational skewing
 36876 rule (§27.5).

36877 27.2.1.3 G⁺2

36878 The terms *tr-wu* ‘grandfather’ and *tr-wi* ‘grandmother’ are used to refer to EGO’s
 36879 grandparents and their siblings, and also as an affectionate for (unrelated) el-
 36880 ders who are two generations above EGO. This term is also applied to great-
 36881 grandparents and all generations above.

36882 As an effect of the Omaha skewing rules (§27.5), the children of EGO’s paternal
 36883 great-grandfather’s sisters (FFFZCh), who belong to EGO’s grandparents’ genera-
 36884 tion, are downgraded three generations, and called by the term *tr-ftsa* ‘nephew’

36885 (§27.2.4.2) by EGO, and they answer back using the G⁺¹ terms *tr-rpu* ‘mother’s
 36886 brother’ and *tr-lar* ‘mother’s sister’ (§27.2.4.5).

36887 27.2.2 Siblings

36888 There are two competing systems for designating siblings in Japhug, one encoding
 36889 the gender of the sibling and that of the possessor and the other relative age.

36890 27.2.2.1 Gender-based system

36891 The gender-based sibling terminological system comprises four terms (Table 27.4),
 36892 which all have cognates in Tangut with identical functions (Jacques 2012e). The
 36893 ♂B and ♀Z terms (in grey shading) are self-reciprocal: for instance, anyone EGO
 36894 addresses as *a-xtry* ‘my brother’ replies back with the same word. The groups of
 36895 same-sex siblings calling each other *a-xtry* ‘my brother’ or *a-sq^haj* ‘my sister’ can
 36896 be referred to by the social relation collective nouns *kyndzixtry* ‘brothers’ and
 36897 *kyndzisq^haj* ‘sisters’ derived from *tr-xtry* and *tr-sq^haj*, respectively (§5.7.8.1).

Table 27.4: Sibling terms in Japhug

Sex of connecting relative (possessor)	Brother	Sister
Male	<i>tr-xtry</i> ♂B	<i>tr-snom</i> ♂Z
Female	<i>tr-wymuu</i> ♀B	<i>tr-sq^haj</i> ♀Z

36898 By contrast, *tr-snom* ♂Z and *tr-wymuu* ♀B are non-self-reciprocal, and are used
 36899 as reciprocal pairs of each other. If EGO is male, he refers his sister(s) as *a-snom*,
 36900 and they/she refers him as *a-wymuu*, and reciprocally if EGO is female. The com-
 36901 pound collective noun *kyndziwymusnom* ‘brother and sisters’ built from these two
 36902 nouns (§5.7.8.1) is used to designate groups of siblings of different sex.

36903 In addition to siblings sharing the same parents, these terms can also be applied
 36904 to paternal parallel cousins (FBCh, §27.2.3.1) and siblings of spouses (WB, WZ,
 36905 HB, HZ, §27.2.5).

36906 27.2.2.2 Relative age-based system

36907 The relative age-based system only comprises two terms, *tr-pi* ‘elder sibling’ and
 36908 *ta-ri* ‘younger sibling’. It distinguishes the relative age of the kin and his/her
 36909 connecting relative (possessor).

Like the terms of the first system, *tv-pi* and *ta-ki* can be used for paternal parallel cousins (§27.2.3.1) and spouses of siblings (§27.2.5), and also as affectionate address term for non-kins of the same generation. The paternal cross-aunt (FZ) also uses *ta-ki* to call her cross-nephews ([♀]BCh §27.2.4.2); the gender-based sibling terminology cannot be used to refer to cross-nephews.

Both systems are possible for address and reference, but the former (Table 27.4) is more frequently used for reference, and the latter for address.

In addition, it is possible to add *tç^heme* ‘girl’ or *tr-tçeu* ‘son’, ‘male’ as postnominal modifiers (9.1.8.1) to *tr-pi* ‘elder sibling’ and *ta-ki* ‘younger sibling’ to specify the gender of the sibling, as in (4).

- 36920 (4) *a-ysi* *tx-tcui* *kumju tu* *tce,*
 1SG.POSS-younger.sibling INDEF.POSS-son five exist:FACT LNK
 36921 ‘I have five younger brothers.’ (14-tApitaRi, 298)

36922 27.2.3 Cousins

Parallel and cross-cousins (children of parent's siblings) are designated by different terms in Japhug.

36925 27.2.3.1 Parallel cousins

36926 There is no dedicated term for paternal parallel cousins (FBCh). They are terminologically
36927 identified with siblings (§27.2.2), and both the gender-based terms
36928 (§27.2.2.1) and the relative age-base terms (§27.2.2.2) can be applied to them (5).

- | | | |
|-------|-----|---|
| 36929 | (5) | <i>tui-βyo yuu w-tcui c^hondxre w-me nura</i> |
| | | GENR.POSS-FB GEN 3SG.POSS-son COMIT 3SG.POSS-daughter DEM:PL |
| 36930 | | <i>nua-cki tce, tce kui-wxti ra nua-cki</i> |
| | | 3PL.POSS-DAT LNK LNK SBJ:PCP-be.big PL 3PL.POSS-DAT |
| 36931 | | <i>“a-pi” tu-kui-ti, kui-xtci ra nua-cki</i> |
| | | 1SG.POSS-elder.sibling IPFV-GENR-say SBJ:PCP-be.big PL 3PL.POSS-DAT |
| 36932 | | <i>“a-βi” tu-kui-ti ηu.</i> |
| | | 1SG.POSS-elder.sibling IPFV-GENR-say be:FACT |
| 36933 | | ‘One’s father’s brother’s sons and daughters, one calls the elder one |
| 36934 | | ‘my elder sibling’ and the younger ones <i>a-βi</i> ‘my younger sibling’. |
| 36935 | | (140425 kWmdza01, 32) |

36936 Maternal parallel cousins have a dedicated term *tr-mytsa*, probably a lexical-
36937 ized compound from *tr-mu* ‘mother’ (in *status constructus* *my-*, §5.4.1) and *tr-ftsa*

36938 ‘sister’s child’, literally ‘mother’s nephew’. A cognate compound is also found in
 36939 Situ ([Zhang forthcoming](#)). This term is self-reciprocal, as shown in (6) (see also
 36940 [91 §18.4.2.1](#) for a description of the same rule with a different wording).

- 36941 (6) *tui-lab yui ui-rjít nura tce t̄y-tcui*
 GENR.POSS-FZ GEN 3SG.POSS-offspring DEM:PL LNK INDEF.POSS-son
 36942 *pui-nui-ŋu t̄cʰeme pui-nui-ŋu tui-mytsa ŋu*
 PST.IPFV-AUTO-be girl PST.IPFV-AUTO-be GENR.POSS-MZCh be:FACT
 36943 (...) *tui-ŋo kūnŋ “a-mytsa” tu-kui-ti, užo kūnŋ “a-mytsa”*
 GENR also 1SG.POSS-MZCh IPFV-GENR-say 3SG also 1SG.POSS-MZCh
 36944 *tu-ti*
 IPFV-say
 36945 ‘One’s mother’s sister’s children, whether boy or girl, are one’s maternal
 36946 parallel cousins (*tui-mytsa*). (...) One calls (them) *a-mytsa*, and they also
 36947 call one *a-mytsa*.’ (140425 kWmdza04, 1-4)

36948 However, some younger speakers also casually use the relative age sibling
 36949 terms to refer to maternal parallel cousins (7).

- 36950 (7) *jinde t̄am tce “a-pi a-bi”*
 nowadays now LNK 1SG.POSS-elder.sibling 1SG.POSS-younger.sibling
 36951 *tu-nui-ti-nui ŋu ma*
 IPFV-AUTO-say-PL be:FACT LNK
 36952 ‘Nowadays (maternal parallel cousin) call (each other) *a-pi* ‘my elder
 36953 sibling’ and *a-bi* ‘my younger sibling’(casually).’ (140425 kWmdza01, 45)

36954 27.2.3.2 Cross-cousins

36955 By contrast, the cross-cousins are referred to by unequal terms. As explained in
 36956 (8), the paternal cross-cousins (father’s sister’s children FZCh) are called using
 36957 the term *t̄r-ftsa*, the same as sister’s children ([§27.2.4](#)), and they reply back by
 36958 calling their maternal parallel cousins (mother’s brother’s children MBCh) with
 36959 *t̄r-rpuu* and *t̄r-lab*, terms that also refer to the parallel cousins’s parents (mother’s
 36960 brother MB and his wife MBW, [§27.2.1](#)).

- 36961 (8) *tui-ni yui ui-rjít nura kui tui-ŋo tui-cki*
 GENR.POSS-FZ GEN 3SG.POSS-children DEM:PL ERG GENR.GENR.POSS-DAT
 36962 *“a-rpuu”, t̄y-tcui pui-kui-ŋu ny “a-rpuu”*
 1SG.POSS-MB INDEF.POSS-son PST.IPFV-GENR-be ADD 1SG.POSS-MB

- 36963 *tu-ti-nuu*, *tc^heme pur-kui-ŋu* *ny* “*a-ta^b*” *tu-ti-nuu*
 IPFV-say-PL girl PST.IPFV-GENR-be ADD 1SG.POSS-MZ IPFV-say-PL
 36964 *kui-ra* *ŋu. tceri, n^ykinuu, tuzo kui tce tce zara*
 INF:STAT-be.needed LNK FILLER GENR ERG LNK LNK 3PL 3PL.POSS-DAT
 36965 *nuu-cki li* *a-ftsa* *tu-kui-ti* *kui-ra ŋu.*
 again 1SG.POSS-ZCh IPFV-GENR-say INF:STAT-be.needed be:FACT
 36966 ‘One’s paternal aunt’s children call oneself *a-rpuu* ‘my maternal uncle’, if
 36967 one is a man they say ‘my maternal uncle’, if one is a woman they say
 36968 *a-łax* ‘my maternal aunt’, but one calls them *a-ftsa* ‘my sister’s son’.
 36969 (140425 kWmdza03, 1-3)

36970 While parallel cross-cousins are given an equal status to siblings in terms of
 36971 generation, cross-cousins are associated to either the lower generation (paternal
 36972 cross-cousins) or the higher generation (maternal cross-cousins). This genera-
 36973 tional skewing rule is characteristic of Omaha kinship systems, and is discussed
 36974 in more detail in §27.1 (see Figure 27.5).

36975 27.2.4 Descending generations

36976 27.2.4.1 EGO’s children

36977 The term for EGO’s children *tx-t^çuu* ‘son’ and *tu-me* ‘daughter’ cannot be used for
 36978 nephews and children of cousins, but can also designate one’s children’s spouses.
 36979 The noun *tx-t^çuu* is also alienabilized (§5.1.2.9) in the sense of ‘boy, man, member
 36980 of the male gender’ (as opposed to *tc^heme* ‘girl’).

36981 27.2.4.2 EGO’s sibling’s children

36982 Sister’s children are called *tx-ftsa*, whether regardless of whether ego is a man or
 36983 a woman (9). This term is also applied to one’s paternal cross-cousins (§27.2.3.2),
 36984 and reflects an Omaha-type generational skewing rule (§27.5).

- 36985 (9) *tx-rpuu* *nuu kunu* “*a-ftsa*” *tu-ti, tx-łax* *nuu*
 INDEF.POSS-MB DEM also 1SG.POSS-ZCh IPFV-say INDEF.POSS-MZ DEM
 36986 *kunu* “*a-ftsa*” *tu-ti*
 also 1SG.POSS-ZCh IPFV-say
 36987 ‘Both the maternal uncle and the maternal aunt call (their sister’s
 36988 children) *a-ftsa*.’ (140425 kWmdza04, 20-21)

The brothers' children are called differently depending on whether EGO is male or female. If EGO is female (10), one calls one's cross-nephews with the term *ta-ki* used for younger siblings (§27.2.2.2) and male parallel cousins (§27.2.3.1), though in this case they do not reply back with *tr-pi* 'elder sibling' as could have been expected, but with the dedicated term *tr-ni* 'father's sister' (§27.2.1), infringing the reciprocity rule between *ta-ki* and *tr-pi* (§27.2.2.2).

- (10) *azo tc^heme piu-ŋu-a tce a-sq^haj yuu ui-rjít*
 1SG girl SENS-be-1SG LNK 1SG.POSS-sister GEN 3SG.POSS-offspring
nui-cki tce "a-ftsa" tu-ti-a ŋu. ...
 3PL.POSS-DAT LOC 1SG.POSS-FZCh IPFV-say-1SG be:FACT
a-wymuu yuu ui-rjít ra nui-cki tce
 1SG.POSS-brother GEN 3SG.POSS-offspring PL 3PL.POSS-DAT LOC
"a-ŋi" tu-ti-a kui-ra ŋu. zara
 1SG.POSS-younger.sibling IPFV-say-1SG INF:STAT-be.needed be:FACT 3PL
kui a-cki "a-ŋi" tu-ti-nui tce, azo kui
 ERG 1SG.POSS-DAT 1SG.POSS-FZ IPFV-say-PL LNK 1SG ERG
"a-ŋi" tu-ti-a ŋu.
 1SG.POSS-younger.sibling IPFV-say-1SG be:FACT
 'I am a woman, and so I call my sisters' children *a-ftsa* 'my nephew', (...) and my brother's children, *a-ŋi* 'my younger sibling'. They_i call me *a-ŋi* 'my father's sister' and I call them *a-ŋi* 'my younger sibling' (140425 kWmdza02, 3-6)

If EGO is male (11), one's parallel nephews and nieces (brother's children) are called with the dedicated term *tr-mduu* BCh⁵. This term cannot be used by women (12).

- (11) *azo tr-tcu a-pui-ŋu-a q^he tce, a-xtøy yuu*
 1SG INDEF.POSS-SON IRR-IPFV-be-1SG LNK LNK 1SG.POSS-brother GEN
ui-rjít numura nui-cki a-mduu ŋu.
 3SG.POSS-offspring DEM:PL 3PL.POSS-DAT 1SG.POSS-BCh be:FACT
 'If I were a man, I would call my brother's children *a-mduu* 'my parallel nephew'. (140425 kWmdza01, 17)
- (12) *tc^heme tce tce tui-mduu me.*
 girl LNK LNK GENR.POSS-BCh not.exist:FACT
 'Women do not have (any relative that can be called with the term) *tr-mduu* 'parallel nephew'. (140425 kWmdza02, 25)

The reciprocal term of *tr-mduu* is *tr-βyo* 'father's brother' (§27.2.1).

37016 27.2.4.3 EGO's parallel cousins's children

37017 In the same way as paternal parallel cousins (FBCh) are terminologically identi-
 37018 fied with siblings (§27.2.3.1), their children (FBChCh) are identified with siblings'
 37019 children: the children of one's male paternal cross-cousins (FBSCh) are called *tr-*
 37020 *mduu* (§27.2.4.2), and those of female paternal cross-cousins (FBDCh) are *tr-ftsa*
 37021 (13).

- 37022 (13) *nunuitcu tce tce li “a-mduu” tu-tuu-ti, woja, tc^he me*
 DEM:LOC LOC LNK again 1SG.POSS-BCh IPFV-2-say INTERJ girl
 37023 *ui-rjit nuu “a-ftsa” tu-tuu-ti, tui-mu*
 3SG.POSS-child DEM 1SG.POSS-ZCh IPFV-2-say GENR.POSS-mother
 37024 *tui-mu kuu-na^htcuuy c^ho kuu-na^htcuuy ηu.*
 GENR.POSS-father SBJ:PCP-be.the.same COMIT SBJ:PCP-be.the.same be:FACT

37025

37026 '(Question: How do ^δI address *a-wa ui-xtry ui-ye ui-cki* my father's
 37027 brother's grandchildren? Response:) In that case, ^δyou say *a-mduu* '^δmy
 37028 brother's son', in the case of a girl's child (FBDCh) you say *a-ftsa* 'my
 37029 sister's son', like (siblings sharing) the same parents.' (elicitation,
 37030 2019-11-30)

37031 The maternal parallel cousin are said by Tshendzin (14) to be referred to using
 37032 the same term as their parents *tr-mytsa* (§27.2.3.1).

- 37033 (14) *azo a-rjit ra kuu (...) azo a-sq^haj yuu*
 1SG 1SG.POSS-offspring PL ERG (...) 1SG 1SG.POSS-sister GEN
 37034 *ui-rjit ra nuu-cki tce “a-mytsa” tu-ti-nuu,*
 3SG.POSS-offspring PL 3PL.POSS-DAT LOC 1SG.POSS-MFZ IPFV-say-PL
 37035 *nunura, yuu nuu-rjit ra nuu-cki q^he li,*
 DEM:PL GEN 3PL.POSS-offspring PL 3PL.POSS-DAT LNK again
 37036 *“a-mytsa” tu-nuu-ti-nuu*
 1SG.POSS-MZCh IPFV-AUTO-say-PL
 37037 'My children (...) call my sister's children, *a-mytsa*, and also called their_i
 37038 children *a-mytsa*' (140425 kWmdza01, 48-49)

37039 There is some evidence that this rule was applied to all descending generations
 37040 (§27.5) in the traditional society. However, Tshendzin also indicates that children
 37041 of MZCh can be alternatively called *tr-ftsa* like sister's children (§27.2.4.2), and
 37042 reciprocate (to their MMZCh or FMZCh) using the term for MB (§27.2.1.2). More
 37043 data is necessary to confirm or disprove this possibility.

37044 27.2.4.4 EGO's cross-cousins's children

37045 The children of EGO's maternal cross-cousins (EGO's mother's brother's grandchildren, MBChCh) are referred to by the same terms as their father and grandfather,
 37046
 37047 *tr-rpuu* if male (15) and *tr-lax* if female: they are uplifted by two generations.

37048 (15) *tua-rpuu* *yuu* *wi-rjiti* *wi-cki* *tce* “*a-rpuu*”
 GENR.POSS-MB GEN 3SG.POSS-offspring 3SG.POSS-DAT LOC 1SG.POSS-MB

37049 *tu-kui-ti*, *wi-ye* *wi-cki* *tce* “*a-rpuu*”
 IPFV-GENR-say 3SG.POSS-grandchild 3SG.POSS-DAT LOC 1SG.POSS-MB

37050 *tu-kui-ti* *kui-ŋgryl* *nui-ŋyu*, *izora kuruu* *kui*
 IPFV-GENR-say INF:STAT-be.usually.the.case SENS-be 1PL Tibetan ERG
 37051
tce.

LNK

37052 ‘One calls one's maternal uncle's children and his grandchildren *a-rpuu*
 37053 ‘my maternal uncle', among us Tibetans.' (140425 kWmdza07, 2)

37054 The children of EGO's paternal cross-cousins (EGO's father's sister's grandchildren, FZChCh) and their descent are referred to with the term *tr-ftsa* 'sister's child', like their parents (16).

37055 (16) *ny-ji* *wi-rjiti* *yuu* *wi-rjiti* *nui* *wi-cki* *tce*
 2SG.POSS-FZ 3SG.POSS-offspring GEN 3SG.POSS-DAT LOC LNK 1SG.POSS-FZ

37056 *tce* “*a-ftsa*” *tu-tua-ti kui-ra.*
 IPFV-2-say INF:STAT-be.needed

37059 ‘You have to say *a-ftsa* 'my sister's child' to the child of the child of your
 37060 paternal cross-aunt.' (elicitation, 2019-11-30)

37061 27.2.4.5 G⁻²

37062 For the generation of EGO's grandchildren, the term *tr-ye* 'grandchild' is used for
 37063 EGO's own grandchildren as well of the grandchildren of EGO's siblings (17) and
 37064 paternal parallel cousins.

37065 (17) *nui* *wi-pa* *pui-ari* *tce* *tce*, *a-wymui*
 DEM 3SG.POSS-down AOR:DOWN-go[II] LNK LNK 1SG.POSS-brother

37066 *wi-ye* *pui-nui-ŋyu*, *a-sq^haj* *yuu*
 3SG.POSS-grandchild PST.IPFV-AUTO-be 1SG.POSS-sister GEN

- 37067 *uu-ye* *pui-nur-ŋu* *tce azo t̄yrcurca*
 3SG.POSS-grandchild PST.IPFV-AUTO-be LNK 1SG together
- 37068 “*a-ye*” *tu-ti-a* *cti.*
 1SG.POSS-grandchild IPFV-say-1SG be.AFF:FACT
- 37069 ‘In the (generation) below (that of one’s nephews, see §15.1.4.1), I say *a-ye*
- 37070 ‘my grandchild’ (to all grandnephews), whether they are my brother’s
- 37071 grandchildren or my sister’s grandchildren.’ (140425 kWmdza02, 16)

37072 In the case of the maternal cross-cousins however, the Omaha skewing rule
 37073 still applies (§27.5), and the term *tx-rpu* ‘mother’s brother’ is used to refer to
 37074 their grandchildren, who conversely call EGO *tx-ftsa* ‘nephew’ (§27.2.1.3).

37075 27.2.5 Spouses and affines

37076 The terminology for affines in Japhug is poor. The only dedicated terms are *tx-*
 37077 *rzaβ* ‘wife’ and *tx-nmas* ‘husband’; for all other affines, terms that also refer to
 37078 consanguines are used.

37079 Both EGO’s spouse’s parents and parent’s sibling and spouses of EGO’s parent’s
 37080 sibling are called using the terms for parallel aunts and uncles (§27.2.1).

37081 Affines of EGO’s generation, including those of EGO’s siblings or of EGO’s cousins,
 37082 are called using the age-based sibling terms *ta-zi* ‘younger sibling’ or *tx-pi* ‘elder
 37083 sibling’ (§27.2.2.2). In the case of EGO’s spouse’s siblings, both the age-based and
 37084 the gender-based (§27.2.2.1) sibling terms can be used (18).

- 37085 (18) *nunura tce tuzo syz a-pui-wxti-nuu qʰe “a-pi”*
 37086 DEM:PL LNK GENR COMP IRR-IPFV-be.big-PL LNK 1SG.POSS-elder.sibling
tu-kui-ti, tuzo syz a-pui-xtci-nuu qʰe
 37087 IPFV-GENR-say GENR COMP IRR-IPFV-be.small-PL LNK
“a-zi” tu-kui-nuu-ti cti.
 37088 1SG.POSS-younger.sibling IPFV-GENR-AUTO-say be.AFF:FACT
“a-xtry” ra tu-o<nuu>mui-ti-nuu cti.
 37089 1SG.POSS-brother PL IPFV-<AUTO>RECIP-say-PL be.AFF:FACT
 37090 ‘Those (ego’s husband’s or wife’s siblings), if they are elder than oneself,
 37091 one calls them *a-pi* ‘my elder sibling’, if they are younger one calls them
 37092 *a-zi* ‘my younger sibling’. They also call each other *a-xtry* ‘my brother’
 and the like.’ (140425 kWmdza05, 8)

37093 27.3 Marriage rules

37094 Marriage is prohibited between siblings and across generations between EGO and
 37095 EGO's parents siblings (whether parallel or cross-uncles and aunts).

37096 Marriage is allowed between maternal parallel cousins (19), who call each other
 37097 *tx-mytsa* (§27.2.3.1).

- 37098 (19) *kyndzi-mytsa numi tce ci ku-pa-ndzi kui-k^hu*
 37099 COLL-MZCh DEM:DU LNK one IPFV-make-DU INF:STAT-be.possible
jnu-ŋu, kui-ŋgryl jnu-ŋu, my-kui-ŋduŋy
 37100 SENS-be INF:STAT-be.usually.the.case SENS-be NEG-INF:STAT-be.harmful
jnu-ŋu.
 37101 SENS-be
 37102 ‘For two maternal parallel cousins, it is possible to get married, it is the
 usage, it is not wrong.’ (140427 kWmdza stWnmW, 03)

37103 Cross-cousin marriage is tolerated (20), despite the fact they use cross-generational
 37104 terms to refer to each other (§27.2.3.2, §27.5). There is here a contradiction be-
 37105 tween the terminology and the marriage rules.

- 37106 (20) *kyndzi-wymui-snom ui-rjít nua puƿaŋjuny, (...) umumi*
 37107 COLL-brother-sister 3SG.POSS-offspring DEM TOP DEM:DU
li ci ku-pa-ndzi kui-k^hu jnu-ŋu. tceri numuu
 37108 again one IPFV-make-DU INF:STAT-be.possible SENS-be LNK DEM
jnu-rkun.
 37109 SENS-be.rare
 37110 ‘Cross-cousins (the children of siblings of different sex) can also get
 married, but it is rare.’ (140427 kWmdza stWnmW, 04-06)

37111 Marriage is prohibited between paternal parallel cousins (20), who refer to
 37112 each other with the age-based sibling terms (§27.2.3.1).

- 37113 (21) *kyndzi-xtry u-rjít nua tx-ŋu tce tce, ci kú-wy-pa*
 37114 COLL-brother 3SG.POSS-children DEM AOR-be LNK LNK one IPFV-INV-make
maka my-kui-k^hu jnu-ŋu.
 37115 at.all NEG-INF:STAT-be.possible SENS-be
 37116 ‘As for brother’s children, it is completely impossible for them to marry
 each other.’ (140427 kWmdza stWnmW, 11)

37117 27.4 Lineages

37118 Most speakers of Gyalrong languages lack a patrilineal family name in the Chi-
 37119 nese fashion, unless they are of partial Chinese ancestry.

37120 Family relatedness across generation can nevertheless be expressed by the
 37121 term *rjitpa* ‘lineage’, borrowed from 藏文 *rgjūd.pa* ‘lineage’, which parents transfer
 37122 to their children (22).

- 37123 (22) *azə nu prabwuu rjitpa ɳu-a tce, a-rfit ni prabwuu*
 1SG DEM TOPO lineage be:FACT-1SG LNK 1SG.POSS-offspring DU TOPO
 37124 *rjitpa kwny kui-rtsi ɳu-ndzi,*
 lineage also SBJ:PCP-PASS-count be:FACT-DU
 37125 ‘I am (Tshendzin) from the lineage of Praqwu, and (therefore) my two
 37126 children also count as being from the lineage of Praqwu.’ (140426 rJitpa,
 37127 4-5)

37128 Lineage is transmitted by both father and mother (23), so that a given person
 37129 can belong to several lineages.

- 37130 (23) *tui-mu pcəs nu t̪y-wy-rtsuz tce, tui-mu*
 GENR.POSS-mother side DEM AOR:UP-INV-count LNK GENR.POSS-mother
 37131 *pcəs rjitpa tu-kui-rtsi ɳu, tui-wa pcəs*
 side lineage IPFV:UP-GENR:S/O-count be:FACT GENR.POSS-father side
 37132 *pa-rtsuz-nu tce, li tui-wa pcəs rjitpa*
 DEM AOR:DOWN-count-PL LNK GENR.POSS-mother side lineage
 37133 *nu pjui-rtsi-nu cti*
 DEM IPFV:DOWN-COUNT-PL be.AFF:FACT
 37134 ‘When one counts from one’s mother’s side, one is counted as being from
 37135 the lineage on one mother’s side, when people count from one’s father’s
 37136 side (downwards), they count as being from one’s father lineage.’ (140426
 37137 rJitpa, 2-3)

37138 Lineage is preserved across many generations; even relatives who have moved
 37139 to other places and become members of another household are still considered
 37140 to belong to the same lineage (24). There are no rules against marriage between
 37141 two person from the same lineage, if no other rule applies (§27.3).

- 37142 (24) *tce turme nu-kui-ymphump^bri ny*
 LNK people AOR-SBJ:PCP-across.generations ADD
 37143 *nu-kui-ymphump^bri nu rjitpa tu-kui-ti ɳu.*
 AOR-SBJ:PCP-across.generations DEM lineage IPFV-GENR-say be:FACT

- 37144 *a-puu-ŋu tce, taqrdo ra yuu nuu-rfit* *nunu, (...)*
 IRR-IPFV-be LNK TOPO PL GEN 3PL.POSS-offspring DEM
- 37145 *ty-tciu puu-nuu-ŋu, tc^heeme puu-nuu-ŋu, tuarne*
 INDEF.POSS-son PST.IPFV-AUTO-be girl PST.IPFV-AUTO-be people
- 37146 *uu-k^ha z-jy-kui-mytcui, jy-kui-myrlzaβ,*
 3SG.POSS-house TRAL-AOR-SBJ:PCP-adopted.as.son AOR-SBJ:PCP-marry
- 37147 *nura yuu nuu-rfit nuu-rfit nuu-rfit*
 DEM:PL GEN 3PL.POSS-offspring 3PL.POSS-offspring 3PL.POSS-offspring
- 37148 *kui-fse nuu-kui-ymp^hump^hrri nunuura tce (taqrdo)*
 SBJ:PCP-be.like AOR-SBJ:PCP-across.generations DEM:PL LNK TOPO
- 37149 *rfitpa tu-kui-ti puu-ŋu.*
 lineage IPFV-GENR-say SENS-be
- 37150 'People (related to each other) generation after generations are called a
 lineage. For instance, the children from Taqrdo, (...) whether men or
 women, whether they have left and been adopted as sons in someone
 else's household or have married away, their children's children's
 children, generation after generation, are called the lineage (of Taqrdo).'
 (140425 kWmdza08 1-5)

37156 27.5 Omaha skewing

37157 27.5.1 Skewing rules and merging rules

37158 A prominent specificity of the Japhug kinship system is the fact that the maternal
 cross-cousins (MBCh) and their children (MBSCh) are referred to by the same
 term as their parents (MB, MBW) as explained in (25), and conversely that the
 maternal cross-cousins (FZCh) are identified with the sisters's children (ZCh)
 (26).

- 37163 (25) *tuazo tc^heeme yuu tui-rfit* *nunu kui tce tce*
 GENR girl GEN GENR.POSS-offspring DEM ERG LNK LNK
- 37164 *tui-wymuu ra nuu-rfit* *nuu-cki tce li*
 GENR.POSS-brother PL 3PL.POSS-offspring 3PL.POSS-DAT LNK again
- 37165 *"a-rpuu a-ɬav"* *tu-ti-nuu kui-ra.*
 1SG.POSS-MB 1SG.POSS-MZ IPFV-say-PL INF:STAT-be.needed
- 37166 'One's children (EGO being a women) call one's brother's children *a-rpuu*
 'my mother's brother' or *a-ɬav* 'my mother's sister'. (140425 kWmdza01,
 60-62)

- 37169 (26) *a-wymuu yuu w-rfit numuu kur azo a-rfit*
 1SG.POSS-brother GEN 3SG.POSS-child DEM ERG 1SG 1SG.POSS-child
 37170 *wi-cki tce “a-ftsa” tu-ti juu-ŋu. tce azo*
 3SG.POSS-DAT 1SG.POSS-ZCh IPFV-say SENS-be LNK 1SG 1SG.POSS-child
 37171 *a-rfit nuu kur a-wymuu wi-rfit nuu tce*
 DEM ERG 1SG.POSS-brother 3SG.POSS-child DEM LNK 1SG.POSS-MB
 37172 *“a-rpuu” numasny “a-ɬas” tu-ti kur-ra.*
 otherwise 1SG.POSS-MZ IPFV-say INF:STAT-be.needed
 37173 ‘My (woman speaking) brother’s child calls my child *a-ftsa* ‘my sister’s
 37174 child’, and my child calls my brother’s child either *a-rpuu* ‘my mother’s
 37175 brother’ or *a-ɬas* ‘my mother’sister’’ (140425 kWmdza04, 24)

37176 These two rules, also detailed in §27.2.3.1 and §27.2.4.2 above with a different
 37177 but semantically equivalent wording, are summarized in Figure 27.1. This chart
 37178 represents the terms used to call siblings, cross-uncles and aunts, cross-cousins
 37179 and their offspring for a male EGO. The system is similar for a female EGO, except
 37180 for siblings (§27.2.2.1) and brother’s children (§27.2.4.2).

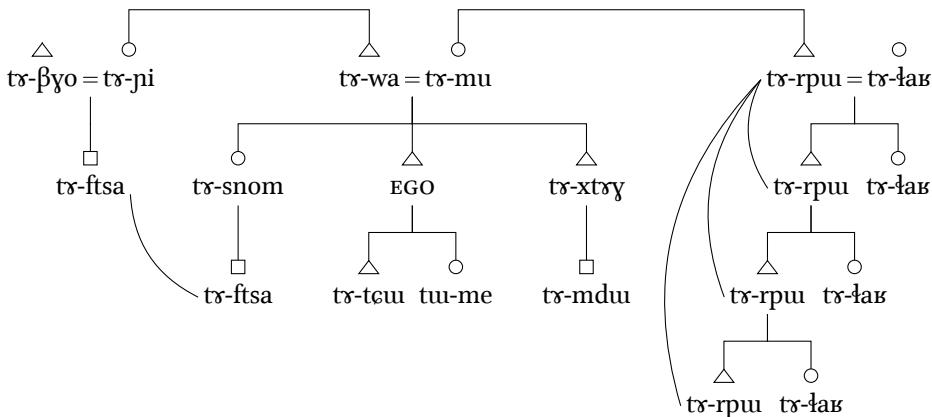


Figure 27.1: The Omaha Skewing system in Japhug (male EGO)

37181 These *skewing* rules² are reciprocal of each other. They can be formally written
 37182 as (27a) and (27b) in Lounsbury’s (1964) fashion.³

²Lounsbury (1964: 357) defines this term as a ‘formal equivalence, in specific contexts, between kinds of different generations’.

³The rules (27a) and (27b) are close to Lounsbury’s (1964: 359) ‘Omaha type I’, but slightly less general.

- 37183 (27) a. **Skewing rule 1:** FZCh → ZCh
 37184 b. Corollaries: MBS → MB; MBD → MZ

37185 Moreover, the fact that the children's of one paternal aunt's children are also
 37186 identified with the sister's children (§27.2.4.4) implies the rule in (29a) and its
 37187 reciprocal (29b), explicitly stated by Tshendzin in (28).

- 37188 (28) *ny-pi* *yuu uu-ye* *kui tce tce, nyj ny-cki*
 37189 2SG.POSS-FZ GEN 3SG.POSS-grandchild ERG LNK LNK 2SG 2SG.POSS-DAT
 “*a-rpu*” *tu-ti* *kui-ra* *cti.*
 37190 1SG.POSS-MB IPFV-say INF:STAT-be.needed be.AFF:FACT
 37191 ‘Your father's sister's grandchildren have to call you ‘my mother's
 brother’.’ (elicitation 2019-11-30)

- 37192 (29) a. **Skewing rule 2:** FZChCh → FZCh → ZCh
 37193 b. Corollaries: (F|M)MBS → MB; (F|M)MBD → MZ

37194 The rules (27a), (27b), (29a), (29b) are described by Tshendzin as being re-
 37195 cursive, implying the theoretical equivalences in (30). Although a considerable
 37196 amount of genealogies would be needed to confirm whether the system indeed
 37197 works in the way predicted in (30), an anecdote discussed in §27.5.2 confirms the
 37198 reality of the equivalence MMMBSSSS = MB.

- 37199 (30) a. $ZCh = (F)^*ZCh(Ch)^*$
 37200 b. $MB = (F|M)^*MB(S)^*S$
 37201 c. $MZ = (F|M)^*MB(S)^*D$

37202 Another skewing rule is observed in the case of female EGO: ⁹BS are called
 37203 with the relative age sibling terms (§27.2.4.2), though this skewing is only partial,
 37204 since they respond using the dedicated term *tr-ni* for FZ (§27.2.1.2).

37205 Finally, another skewing rule (31a) appears with maternal parallel cousins
 37206 (§27.2.4.3).

- 37207 (31) a. **Skewing rule 3:** MZChCh → MZCh
 37208 b. Corollary: (F|M)MZCh → MZCh

37209 If the rules (31a) and (31b) are also recursive, the formal equivalence (32) is im-
 37210 plied. Data is lacking to ascertain whether this theoretical possibility is verified,

37211 but §27.5.3 discusses a case in these lines. In this system, unlike in that described
 37212 by Lounsbury (1964: 361), the MMZCh are not equated with the MB and MZ (due
 37213 to absence of the merging rules MZS → B and MZD → Z), but rather with the
 37214 MZCh.

37215 (32) $MZCh = (F|M)^*MZCh(Ch)^*$

37216 However, it appears to be possible to alternatively use the term *tr-ftsa* ‘ZS’ for
 37217 MZChCh. The implication of this rule for the whole system are not considered
 37218 here until further data is available.

37219 The terminological identification of paternal parallel cousins with siblings
 37220 (§27.2.3.1) defines the following merging rule (33).

37221 (33) **Merging rules:** FBS → B; FBD → Z

37222 Unlike the Omaha systems described in Lounsbury (1964: 360), the merging
 37223 rule (33) does not concern maternal parallel cousins (§27.2.3.1). It implies the
 37224 equivalences MFBS = MB, MFBD = MZ, FFBS = FB and FFBD = FZ, and more
 37225 generally (34), in combination with the skewing rules in (30) above.

- 37226 (34)
- a. $MB = (F|M)^*MFB(S)^*S$
 - b. $MZ = (F|M)^*MFB(S)^*D$
 - c. $FB = (F)^nFB(S)_{n \geq 1}^n$
 - d. $FZ = (F)^nFB(S)^{n-1}D_{n \geq 1}$

37230 Some uncertainty remains in parts of the system. In particular, the status of the
 37231 MBDCh (and its reciprocal MFZCh) is unclear. In theory, given the $MBD \rightarrow MZ$
 37232 rule (29b), one would expect that $MBDCh = MZCh$ (*tr-mytsa*), and likewise that
 37233 the $MFZCh = MZCh$ (due to the reciprocal rule 30a). However, at the moment of
 37234 writing I could not confirm whether this is true or not.

37235 The Japhug system shows prototypical Omaha characteristics, in particular
 37236 the basic skewing rules (27a) and (27b), and the identification of paternal par-
 37237 allel cousins with siblings (33). It differs from prototypical Omaha systems de-
 37238 scribed in the literature in lacking an Iroquois pattern identifying parallel uncles
 37239 and aunts with parents (FB → F, MZ → M, Trautmann 2012: 34), maternal par-
 37240 allel cousins with siblings (Mzs → B, Mzd → Z), and the fact that preferred
 37241 marriage is with maternal parallel cousins (§27.3) rather than with cross-cousins
 37242 (Trautmann 2012: 41).

37243 27.5.2 Cross-cousin lineages

37244 A logical consequence of the recursivity of the skewing rule (30, §27.5.1), as they
 37245 are described by Tshendzin (§27.2.4.4) is that a considerable divergence between
 37246 biological age and age rank will occur in some cases. While a full investigation
 37247 of genealogies is necessary to verify this implication (an endeavour that goes be-
 37248 yond the scope of this grammar), an anecdote reported by two witnesses suggests
 37249 that this indeed used to be the case in the traditional society.

37250 In (35), a man born in the 1950s reports his experience with the skewing rule:
 37251 one of his great-grandmother (either MMM or MMMM, I could not ascertain)
 37252 came from the village of Tshapa (with irregular orientation WESTWARDS, opposite
 37253 of the geographical reality, §15.1.5.3), where most inhabitants are from the lineage
 37254 of her brother.

- 37255 (35) *izo ji-wi numuu ts^hapa nuu-kui-ye*
 1PL 1PL.POSS-grandmother DEM TOPO AOR:WEST-SBJ:PCP-come[II]
 37256 *pjx-ηu. (...)* *azo tx-nukontso-a u-q^hu tce, ts^hapa ju-ce-a*
 IFR.IPFV-be 1SG AOR-work-1SG 3SG.POSS-after LNK TOPO IPFV-go-1SG
 37257 *tce, ts^hapa nuu ji-kumdzha bjja nuu-ηu tce, (...)* *tce*
 LNK TOPO DEM 1PL.POSS-relative completely SENS-be LNK LNK
 37258 *a-rpuu a-tar ntsuu tu-kui-ti nuu-ra ma*
 1SG.POSS-MB 1SG.POSS-MZ always IPFV-GENR-say SENS-be.needed LNK
 37259 *nuu-<beifen> nuu-mbro, (...)* *tx-pytso*
 3PL.POSS-age.rank SENS-be.high INDEF.POSS-child
 37260 *kui-xtci~xtci ra kui nuu a-p^he “a-ftsa*
 SBJ:PCP-EMPH~be.small PL ERG DEM 1SG.POSS-DAT 1SG.POSS-ZCh
 37261 *a-ftsa” tu-ti-nui, “a-rpuu a-tar” kx-ti*
 1SG.POSS-ZCh IPFV-say-PL 1SG.POSS-MB 1SG.POSS-MZ INF-say
 37262 *nuu-ra, tcendyre tu-ti-a kui-zgyt nuu-cti*
 SENS-be.needed LNK IPFV-say-1SG INF:STAT-be.needed SENS-be.AFF
 37263 *ri numuu azo m^uaj-nyx-tsaŋ-a*
 LNK DEM 1SG NEG:SENS-TROP-be.fair-1SG
 37264 ‘(One of) our grandmothers was from Tshapa (...) After I started working,
 37265 when I went to Tshapa, there everybody is our relatives, (...) I had to call
 37266 all of them ‘my mother’s brother, my mother’s sister’, because they are of
 37267 higher 輩分 <bèifen> ‘age rank’, (... even) small children called me ‘my
 37268 sister’s son’, and I had to call them ‘my mother’s brother, my mother’s
 37269 sister’. Although this was what I had to say, I found it unfair.’ (2010-06)

37270 He thus had to call all the inhabitants of the village using the MB and MZ terms
 37271 *tx-rpu* and *tx-lab*, even young children. This report suggests that the recursivity
 37272 of the rules as described in (30) above is a reality: descendants of MMMB or
 37273 MMMMB, even one or two generations below oneself, are still called MB and
 37274 MZ. It also suggests that not only MBS*, but also MBDCh and their descendants
 37275 might keep the privileged status (and thus not be equated with maternal parallel
 37276 cousins MZCh as predicted in §27.5.1), though this has to be tested with additional
 37277 data.

37278 Tshendzin reports the same anecdote (36), and also indicates that the recur-
 37279 sivity of the skewing rule is felt clumsy by younger speakers, who prefer to use
 37280 terms for parallel uncles, aunts or siblings: this aspect of the Japhug languages
 37281 is thus highly endangered.

- 37282 (36) *wi-wi* *yuu wi-wi* *nunu ts^hapa nutcu*
 37283 3SG.POSS-grandmother GEN 3SG.POSS-grandmother DEM TOPO DEM:LOC
nui-kui-ye *pjy-ŋu* *tce tce nui yuu*
 AOR:WEST-SBJ:PCP-come[III] IFR.IPFV-be LNK LNK DEM GEN
wi-wi *yuu wi-wymuu* *nunu yuu*
 37284 3SG.POSS-grandmother GEN 3SG.POSS-brother DEM GEN
wi-rjit *yuu wi-rjit* *yuu wi-rjit* *yuu*
 37285 3SG.POSS-offspring GEN 3SG.POSS-offspring GEN 3SG.POSS-offspring GEN
wi-rjit *kui-fse* *nunura nui-eki* *tce tce*
 37286 3SG.POSS-offspring SBJ:PCP-be.like DEM:PL 3PL.POSS-DAT LOC LNK
“a-rpu” *ny a-lab”* *ntsu tu-ti* *pjy-ra.* (...)
 37287 1SG.POSS-MB ADD 1SG.POSS-MZ always IPFV-say IPFV.IFR-be.needed
t^ham tce nura st^huci w-kui-ti *maje,* *tce*
 37288 now LNK DEM:LOC so.much 3SG.POSS-SBJ:PCP-say not.exist:SENS LNK
kui-xtei *nura kumy “a-ftsa”* *ky-ti* *jui-nyzra^h-nui*
 37289 SBJ:PCP-be.small DEM:PL also 1SG.POSS-ZCh INF-say SENS-be.ashamed-PL
q^he “a-βyo” *ra tu-nui-ti-nui,* *“a-pi”* *ra*
 37290 LNK 1SG.POSS-FB PL IPFV-AUTO-say-PL 1SG.POSS-elder.sibling PL
tu-nui-ti-nui. *tce t^ham tu-otšoblo^h* *cti.* *kuicungur*
 37291 IPFV-AUTO-say-PL LNK now IPFV-be.mixed be.AFF:FACT in.former.days
a-pui-ŋu *tce nui tu-kui-ti* *kui-ra* *pjy-cti* *ny.*
 37292 IRR-IPFV-be LNK DEM IPFV-GENR-say INF:STAT-be.needed IFR.IPFV-be SFP
 ‘His grandmother’s grandmother had come from Tshapa, and he had to
 37293 call all of his grandmother’s brother’s children’s children’s
 37294 children (etc) ‘my mother’s brother, my mother’s sister’ (including small
 37295

37296 children). (...) Now no one says this any more, this young ones are
 37297 ashamed of calling (elders) 'my sister's child' and instead say 'my father's
 37298 brother' or 'my elder sibling'. Now it is all mixed up, but in former times,
 37299 one had to speak like that.' (140425 kWmdza07, 8-12)

37300 27.5.3 Maternal parallel cousin lineages

37301 The reliability of the skewing rule (31a) concerning maternal parallel cousins is
 37302 confirmed by one particular case, in which a lady addressed her mother-in-law by
 37303 the term *tr-mytsa* 'MZCh' (who answered using the same term, §27.2.3.1). When
 37304 I asked her whether they were actual maternal parallel cousins (children of two
 37305 sisters, MZCh), she answered that she used this term because her father himself
 37306 called her mother-in-law (and her mother-in-law's mother) *tr-mytsa*, though they
 37307 were not themselves true first cousins, the eventual consanguine relationship
 37308 going back several generations. She also specified that she called her husband
 37309 *tr-mytsa* before marrying him (§27.3).

37310 This case suggests that the reciprocal *tr-mytsa* 'maternal parallel cousin' rela-
 37311 tionship remains regardless of the number of generations in each lineages (as
 37312 formalized in 32 above).

37313 27.5.4 Application

37314 As an illustration of the rules established in the previous sections, Table 27.6 sum-
 37315marizes the theoretical possibilities for first and second cousins *once removed*, in-
 37316 cluding the main points of uncertainty in grey shading. The equivalences are
 37317 given below each term in brackets, referring to the equivalent focal kin (Ta-
 37318 ble 27.5); for instance (=ZCh) should be read 'called like the ZCh' (tr-ftsa, §27.2.4.2).

37319 The reciprocal terms can be rechecked using the inversion table 27.2 above.

37320 It is difficult to be fully certain of the reliability of these extrapolations without
 37321 an in-depth study of genealogies. This Table provides a framework for future
 37322 research on kinship systems in Japhug and Gyalrong-speaking areas.

Table 27.5: Focal kin terms

Kin	term	Reciprocal	term
M	<i>tr-mu</i>	${}^{\textcircled{S}}\text{S}/{}^{\textcircled{S}}\text{D}$	<i>tr-t̄cui/tuu-me</i>
F	<i>tr-wa</i>	${}^{\textcircled{S}}\text{S}/{}^{\textcircled{S}}\text{D}$	<i>tr-t̄cui/tuu-me</i>
MB	<i>tr-rpuu</i>	${}^{\textcircled{S}}\text{ZCh}$	<i>tr-ftsa</i>
MZ	<i>tr-t̄ab</i>	${}^{\textcircled{S}}\text{ZCh}$	<i>tr-ftsa</i>
FB	<i>tr-βyo</i>	${}^{\textcircled{S}}\text{BCh}$	<i>tr-mduu</i>
FZ	<i>tr-ni</i>	${}^{\textcircled{S}}\text{BCh}=\text{yB} Z$	<i>ta-bi</i>
MZCh	<i>tr-mxtsa</i>	=	
eB Z	<i>tr-pi</i>	$\text{yB} Z$	<i>ta-bi</i>
${}^{\textcircled{S}}\text{Z}$	<i>tr-snom</i>	${}^{\textcircled{S}}\text{B}$	<i>tr-wymuu</i>
${}^{\textcircled{S}}\text{B}$	<i>tr-xtr̄y</i>	=	
${}^{\textcircled{S}}\text{Z}$	<i>tr-sq^haj</i>	=	

Table 27.6: First and second cousins once removed (hypothetical)

First cousin	Reciprocal	Second cousin	Reciprocal
FFBS (=FB)	δ FBSCh (= δ BCh)	FFBSCh (= FBCh=B Z)	FFBSCh (=B Z)
FFBD (=FZ)	φ FBSCh (= φ BS=yB Z)	FFBDCh (= FZCh=ZCh)	MFBSCCh (=MBCh=MB Z)
FFZCh (=ZCh)	MBSS (=MB)	FFZChCh (=ZCh)	(F M)MBSS (=MB)
FMBS (=MB)	δ FZSCh (=ZCh)	FMBSCCh (=MB)	FFZSCh (=ZCh)
FMBD (=MZ)	φ FZSCh (=ZCh)	FMBDCh (=FMZCh=MZCh?)	MFZSCh (=MZCh?)
FMZCh (=MZCh?)	MZDS (=MZCh?)	FMZChCh (=MZCh?)	(F M)MZDS (=MZCh?)
MFBS (=MB)	δ FBDCh (=FZCh=ZCh)	MFBSCh (=MB Z)	FFBDCh (=FFZCh=ZCh)
MFBD (=MZ)	φ FBDCh (=FZCh=ZCh)	MFBDCh (=MZCh?)	MFBDCCh (=MZCh?)
MFZCh (=MZCh?)	MBDCh (=MZCh?)	MFZChCh (=MZCh?)	(F M)MBDCh (=MZCh?)
MMBS (=MB)	δ FZDCh (=ZCh)	MMBSCh (=MB Z)	FFZDCh (=ZCh)
MMBD (=MMZ=MZ)	φ FZDCh (=ZCh)	MMBDCh (=MZCh?)	MFZDCh (=MZCh?)
MMZCh (=MZCh)	MZDCh (=MZCh)	MMZChCh (=MZCh?)	(F M)MZDCh (=MZCh?)

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38302	<i>-sti</i> ‘alone’, 148	38333	<i>ajpomxts^hum</i> ‘be of uneven thickness’, 1009
38303	<i>X-ma^h</i> ‘size of shoes’, 204	38334	<i>ajpomxts^hum</i> ‘have uneven thickness’, 1009
38304	<i>NEG + spa = NEG + rka = tu/me</i> ‘be guilty/innocent’, 487, 512	38335	<i>ajts^hi</i> ‘be given to drink’, 843, 878, 882
38305		38336	<i>ajtu</i> ‘accumulate’, 78, 815
38306	<i>NEG + swifts^hi</i> ‘force’, 514	38337	<i>ajbu</i> ‘be bent’, 96
38307	<i>NEG + tç^hyz</i> ‘be contrary to religion’, 512	38338	<i>ajku</i> ‘be bowed’, 97, 1067, 1068
38308		38339	<i>ajχor</i> ‘be flat’, 78
38309	<i>NEG + zuu</i> ‘not just be’, 512, 513, 1430	38340	<i>aki</i> ‘down’, 157
38310	<i>NEG-xsi</i> ‘it is not known’, 512	38341	<i>akyrmtçor</i> ‘be pointy-headed’, 1067, 1068
38311	<i>a-mbro</i> ‘my horse’, 109, 114	38342	<i>akuic^hožle</i> ‘east wind’, 574
38312	<i>a-pi</i> ‘my elder sibling’, 114	38343	<i>akuic^hožle</i> ‘north/east wind’, 168
38313	<i>a-rte</i> ‘my hat’, 135	38344	<i>akuu</i> ‘east’, 338
38314	<i>a-tçuu</i> ‘my son’, 110, 300	38345	<i>ak^hu</i> ‘call’, 531, 854, 860, 861, 900, 941
38315	<i>a-tç^ha</i> ‘news for me’, 130	38346	<i>ak^hrzŋga</i> ‘call’, 856
38316	<i>a-tya</i> ‘my handspan’, 271	38347	<i>ak^hrzŋga</i> ‘shout, call’, 73, 854, 860
38317	<i>a-xtu</i> ‘my belly’, 1351	38348	<i>alo</i> ‘upstream’, 338, 629, 636
38318	<i>a-ye</i> ‘my grandchild’, 110	38349	<i>alxaj</i> ‘not properly put’, 48
38319	<i>a-yŋi</i> ‘my friend’, 109	38350	<i>alulju</i> ‘be cylindrical’, 1053
38320	<i>a-ŋgra</i> ‘my enemy’, 109	38351	<i>alulrt</i> ‘fight’, 532, 533, 901, 902
38321	<i>a-βri</i> ‘my body’, 320	38352	<i>amar</i> ‘be smeared with’, 312
38322	<i>aborbor</i> ‘cluster around’, 1052	38353	<i>ambi</i> ‘be given’, 613, 878, 882
38323	<i>aci</i> ‘be wet’, 126, 1008	38354	<i>ambumbi</i> ‘give to each other’, 897
38324	<i>ac^hsla</i> ‘be capable’, 999	38355	<i>amdzuu</i> ‘sit’, 495, 796, 854, 861, 1078, 1082, 1119
38325	<i>ac^hxt</i> ‘be X years apart’, 1010	38356	<i>amp^hur</i> ‘be wrapped’, 870
38326	<i>ac^hyt</i> ‘have X years of difference’, 383 ⁶ , 528, 532, 999	38357	<i>amqaj</i> ‘fight’, 1009
38327		38358	<i>amtçor</i> ‘be pointy’, 864, 999, 1067, 1068
38328	<i>ac^huic^ha</i> ‘be capable’, 999	38359	<i>amyrk^ho</i> ‘give and take’, 908, 909
38329	<i>afsk^hr</i> ‘be surrounded’, 877	38360	
38330	<i>afsuja</i> ‘be of the same size’, 839, 1008 ³ , 1434, 1437	38361	
38331		38362	
38332	<i>ajabmba</i> ‘be of uneven thickness’, 1009	38363	

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38364	<i>amx̥bu</i> ‘have rickets’, 1067, 1068	38403	<i>andzuiþri</i> ‘protect each other’, 60, 908
38365	<i>amuufse</i> ‘know each other’, 903, 906	38404	<i>antsyndu</i> ‘get exchanged (by mistake)’, 973, 975
38366	<i>amumi</i> ‘be in good terms with’, 330,	38405	
38367	903	38406	<i>antç̥hu</i> ‘be many’, 253
38368	<i>amumi</i> ‘be in good terms’, 532	38407	<i>anth̥yar</i> ‘bounce’, 96
38369	<i>amumto</i> ‘see each other’, 903, 905, 907	38408	<i>anvnts̥hunts̥i</i> ‘love each other’, 900 ¹⁴
38370	<i>amumts̥ym</i> ‘hear each other’, 903	38409	<i>anypupe</i> ‘like each other’, 900
38371	<i>amumts̥ym</i> ‘hear from each other’,	38410	<i>anumqaj</i> ‘fight’, 532
38372	905, 907	38411	<i>anurjyruru</i> ‘look at each other’s face’, 902
38373	<i>amurmbat</i> ‘be close to each other’, 903,	38412	
38374	906, 907	38413	<i>anurjyruru</i> ‘look at each other’s faces’, 1069
38375	<i>amurpu</i> ‘bump against each other’, 903	38414	
38376	<i>amurpu</i> ‘bump one against the other’,	38415	<i>anuisukhukh̥o</i> ‘extort each other’, 900
38377	905	38416	<i>anuybuuybuuy</i> ‘miss each other’, 900
38378	<i>amurq̥hi</i> ‘be far from each other’, 903,	38417	<i>anuyro</i> ‘play’, 622
38379	906	38418	<i>apa</i> ‘become’, 528, 529, 870–872, 879, 893, 1221, 1333
38380	<i>amust̥haþ</i> ‘be one against the other’,	38419	
38381	903, 904, 907	38420	<i>aprvt</i> ‘have been broken’, 875
38382	<i>amusuuz</i> ‘be well-known’, 943	38421	<i>apymbat</i> ‘be easy to do’, 954, 1061–
38383	<i>amuti</i> ‘say to each other’, 903, 904,	38422	1063
38384	1293 ¹⁴	38423	<i>apypyi</i> ‘be greyish’, 990
38385	<i>amutso</i> ‘be clear (of speech)’, 943	38424	<i>aqarjurgurje</i> ‘be yellowish’, 990
38386	<i>amutso</i> ‘understand each other’, 903	38425	<i>araþ</i> ‘liquor’, 108
38387	<i>amutuy</i> ‘meet each other’, 903	38426	<i>argyle</i> ‘be extremely happy’, 1061
38388	<i>amuzyut</i> ‘be evenly distributed’, 868,	38427	<i>arju</i> ‘speak’, 70, 672, 797, 800, 1008
38389	945, 1395	38428	<i>arku</i> ‘be in’, 870, 871, 873, 874, 1233
38390	<i>amnax̥ts̥um</i> ‘be petty’, 151, 1067	38429	<i>arku</i> ‘be put in, be located in’, 730
38391	<i>amnym</i> ‘be even, be homogeneous’,	38430	<i>arlut</i> ‘be many’, 1061
38392	575	38431	<i>armbat</i> ‘be near’, 628, 635, 892, 903, 906
38393	<i>amnym</i> ‘be homogeneous’, 815	38432	
38394	<i>anamana</i> ‘identical’, 410, 1197	38433	<i>armbat</i> ‘near’, 76
38395	<i>anbaþ</i> ‘hide’, 84, 824, 833	38434	<i>aro</i> ‘have’, 711, 1010
38396	<i>andi</i> ‘west’, 338	38435	<i>aro</i> ‘own’, 12, 495, 528, 529, 1234, 1270
38397	<i>andu</i> ‘be exchanged for’, 975	38436	<i>arq̥hi</i> ‘be far’, 630, 635, 892, 903, 906
38398	<i>andzuit</i> ‘bark’, 854, 856	38437	<i>artar</i> ‘be forked’, 149 ¹² , 149, 1008
38399	<i>andzirya</i> ‘be neighbours’, 1018	38438	<i>artsi</i> ‘be counted as’, 839, 870
38400	<i>andzirya</i> ‘be together as neighbours’,	38439	<i>artsi</i> ‘count as’, 528, 529, 880
38401	177	38440	<i>artum</i> ‘be round’, 1010
38402	<i>andz̥ymstu</i> ‘well-ironed’, 1061	38441	<i>arþi</i> ‘be blue’, 840

38442	<i>arŋi</i> ‘be green’, 166, 758	38481	<i>atsutsu</i> ‘have time’, 496
38443	<i>arčo</i> ‘be finished’, 280, 1395	38482	<i>atsʰor</i> ‘be attached’, 870, 875, 1058
38444	<i>arykʰumkʰyl</i> ‘be clustered in patches’,	38483	<i>atyr</i> ‘fall down’, 496
38445	1012	38484	<i>atyr</i> ‘fall’, 474, 962
38446	<i>aryrqʰurqʰioř</i> ‘be grooved’, 1012	38485	<i>atuuta</i> ‘release each other’, 901
38447	<i>aryryy</i> ‘happen at the predicted time’,	38486	<i>atuy</i> ‘meet’, 477, 478, 903, 905, 958,
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38449	<i>aryrngioř</i> ‘be grooved’, 88	38488	<i>atʰi</i> ‘downstream’, 636
38450	<i>arytsʰi</i> ‘be cooked like rice gruel’, 822,	38489	<i>atʰi</i> ‘upstream’, 338
38451	1012, 1013	38490	<i>awuwum</i> ‘gather together’, 898, 901
38452	<i>arytčʰa</i> ‘be determined from’, 822	38491	<i>axtčuxte</i> ‘be of uneven size’, 1009, 1061
38453	<i>aryzduzda</i> ‘call each other’, 1013	38492	<i>azgur</i> ‘bow, bend down’, 442
38454	<i>arycwucryz</i> ‘be striped’, 1012	38493	<i>ačkala</i> ‘be lame’, 1008
38455	<i>arufsapař</i> ‘be like an animal’, 1011	38494	<i>ačprum</i> ‘be badly sewed’, 93
38456	<i>aručʰutsa</i> ‘be like a bowl’, 1011	38495	<i>ačquwa</i> ‘be blind’, 1008
38457	<i>arulaba</i> ‘be shaped like a horn’, 1011	38496	<i>ačqʰe</i> ‘cough’, 787, 797, 815, 1010
38458	<i>arułdžanku</i> ‘be green’, 141, 1010, 1011	38497	<i>ačya</i> ‘be of the same age’, 532
38459	<i>arumuntor</i> ‘be like a flower’, 1011	38498	<i>ačya</i> ‘be the same age’, 1008
38460	<i>aruqromkemdos</i> ‘be purple’, 1011	38499	<i>ačryi</i> ‘be quick’, 70
38461	<i>aruusujno</i> ‘be like grass’, 1011	38500	<i>ayro</i> ‘play’, 779, 854, 858, 1009
38462	<i>arutaqař</i> ‘be like a needle’, 1011	38501	<i>ayryrum</i> ‘be whitish’, 990
38463	<i>aruutrypa</i> ‘be like snow’, 1011	38502	<i>ayrurlurlas</i> ‘destroy each other’, 899
38464	<i>aruutrtču</i> ‘be boyish’, 1011	38503	<i>ayu-mdzu</i> “, 182
38465	<i>aručorčos</i> ‘be like paper’, 1011	38504	<i>ayuduχun</i> ‘be fragrant’, 1014, 1033
38466	<i>arnglum</i> ‘be caved in’, 75, 90, 912, 1000	38505	<i>ayuijwař</i> ‘have a lot of leaves’, 1014
38467	<i>arvurku</i> ‘be wrinkled’, 1388	38506	<i>ayuijuijař</i> ‘have a lot of arms’, 1014,
38468	<i>asqʰlu</i> ‘be concave’, 90	38507	1015
38469	<i>asti</i> ‘be blocked’, 161, 164, 870, 880	38508	<i>ayulu</i> ‘producing a lot of milk’, 31
38470	<i>astu</i> ‘be straight’, 605, 1061	38509	<i>ayumar</i> ‘produce a lot of butter’, 1014
38471	<i>asymumtsʰumtsʰym</i> ‘inform each other’,	38510	<i>ayumar</i> ‘producing a lot of butter’,
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38476	<i>asunqʰuinqʰi</i> ‘make each other dirty’,	38515	<i>ayumdzu</i> ‘have a lot of thorns’, 1014,
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38478	<i>ata</i> ‘be on’, 870, 873, 874, 1222, 1233	38517	<i>ayumumi</i> ‘have a lot of leg’, 1014
38479	<i>atsa</i> ‘prick’, 353	38518	<i>ayumumi</i> ‘have a lot of legs’, 1015
38480	<i>atsu</i> ‘have the time to’, 704	38519	<i>ayumrař</i> ‘have eyes’, 1014

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38521	<i>ayuntrþ</i> ‘be sparkling’, 1014	38560	<i>aþzu</i> ‘become’, 430, 1138, 1333
38522	<i>ayurme</i> ‘have a lot of hair’, 1014	38561	<i>aþzu</i> ‘become, grow’, 870–873, 879, 893
38523	<i>ayurpas</i> ‘go along well’, 1014, 1016	38562	<i>aþzurχsum</i> ‘have a triangular shape’, 1010
38524	<i>ayurþul</i> ‘have much money’, 1014	38563	
38525	<i>ayurþit</i> ‘have many children’, 1014	38564	<i>aχa</i> ‘have a hole, have a chip’, 160
38526	<i>ayururu</i> ‘that can be done at the same time as’, 822	38565	<i>aχa</i> ‘lacking a piece’, 240
38527		38566	<i>bjiubjuy</i> ‘hanging in great number’, 87
38528	<i>ayuruz</i> ‘inherit from’, 1016	38567	
38529	<i>ayusmyn</i> ‘have a medical effect’, 1014	38568	<i>boþbos</i> ‘in group, in order’, 275
38530	<i>ayutuy</i> ‘be poisonous’, 1014, 1015, 1019	38569	<i>bruþru</i> ‘having pimples’, 91
38531	<i>ayuzruy</i> ‘have a lot of lice’, 1014	38570	<i>buwa</i> ‘carry on the back’, 1355
38532	<i>ayungyr</i> ‘have a lot of fat’, 1014	38571	<i>buy</i> ‘miss home’, 897, 900
38533	<i>ayunþunyuu</i> ‘have a lot of layers’, 1014, 1015	38572	<i>buy</i> ‘miss’, 854, 858
38534		38573	<i>can</i> ‘dammed wall’, 57
38535	<i>ayunþunyuu</i> ‘having a lot of layers’, 822	38574	<i>ci u-mp^hru ci</i> ‘one after the other’, 359
38536		38575	<i>cimbrom</i> ‘blister’, 1224
38537	<i>ayuca</i> ‘have a lot of meat’, 1014	38576	<i>cinx</i> ‘(not) even one’, 398, 402, 405, 519
38538	<i>ayuþkat</i> ‘be loaded with’, 1035	38577	
38539	<i>ayuþli</i> ‘produce a lot of dung’, 1014	38578	<i>cinx</i> ‘not even one’, 262
38540	<i>ayuþu</i> ‘be about to’, 1322, 1350, 1353	38579	<i>cirndzi</i> ‘sand’, 76
38541	<i>ayuþswaj</i> ‘correspond well’, 86	38580	<i>cisc^hiz</i> ‘somewhere’, 209, 214, 324
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38543	<i>apaj</i> ‘be done quickly’, 1357	38582	<i>ci</i> ‘a’, 185
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38547	<i>armbum</i> ‘be concave’, 81, 152 ¹⁴	38586	
38548	<i>arþa</i> ‘be bald, be bare’, 408	38587	<i>ci</i> ‘one, someone’, 209
38549	<i>arvndundyt</i> ‘everywhere’, 218, 325, 369, 983, 1194, 1195	38588	<i>ci</i> ‘pour completely (of grains or liquids)’, 127
38550		38589	
38551	<i>azo</i> ‘I’, 1196	38590	<i>ci</i> ‘pour completely’, 126
38552	<i>azo</i> ‘1SG’, 9, 305, 1197	38591	<i>ci</i> ‘someone’, 209
38553	<i>azrwu</i> ‘be lame’, 1008	38592	<i>ci</i> ‘the other one’, 424
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38556	<i>aþdorþdi</i> ‘be in good health’, 878	38595	<i>co</i> ‘valley’, 48, 87, 273
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38558	<i>aþras</i> ‘be attached’, 870	38597	<i>cruycruy</i> ‘in a mess’, 91

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38600	<i>cuurmbuu</i> ‘stone heap’, 60	38639	<i>dudut</i> ‘turtle dove’, 455
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38631	<i>do</i> ‘be old (of plants)’, 120, 787	38670	<i>fsraj</i> ‘he protects’, 93
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39023	<i>lcuylcuyl</i> ‘drenching’, 74	39062	<i>lyŋytſysqi</i> ‘fifty or sixty’, 246
39024	<i>lcʰyaþlcʰyaꝝ</i> ‘nice to wear’, 96	39063	<i>lyŋytſyy</i> ‘five or six’, 244–246, 251
39025	<i>lduyi</i> ‘bharal’, 74	39064	<i>lyy</i> ‘graze’, 722, 741
39026	<i>ldzajldzaj</i> ‘hanging’, 74	39065	<i>lyy</i> ‘herd’, 585, 1065

39066	<i>l̥yβdelyŋu</i> ‘four or five’, 245, 251	39105	<i>mba</i> ‘be thin’, 157, 665, 775
39067	<i>lulu</i> ‘cat’, 36, 173, 404, 453, 569, 1324	39106	<i>mbaŋ</i> ‘split, break’, 911
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39077		39116	<i>mbri</i> ‘cry, sing’, 82, 161, 1061
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39080		39119	<i>mbro</i> ‘be big, be high’, 665
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39084	<i>manku</i> ‘the one in the east side’, 170	39123	<i>mbr̥sno</i> ‘horse saddle’, 147
39085	<i>maylo</i> ‘be upstream’, 646, 647, 885, 1037	39124	<i>mbr̥stsʰi</i> ‘rice soup’, 100, 148
39086	<i>maylo</i> ‘the one upstream’, 170	39125	<i>mbr̥st</i> ‘break’, 91, 875, 910, 919, 1066, 1069
39087	<i>mayndi</i> ‘be in the west side’, 647	39126	
39088	<i>mayndi</i> ‘the one in the west side’, 170	39127	<i>mbr̥z</i> ‘rice’, 100, 148
39089	<i>maypa</i> ‘be on the lower side’, 647	39128	<i>mbrułtçu</i> ‘knife’, 172, 999
39090	<i>maypa</i> ‘the one on the lower side’, 170	39129	<i>mbuz</i> ‘overflow’, 816
39091	<i>mantas</i> ‘be on the upper side’, 647	39130	<i>mbyaŋ</i> ‘turn over’, 95, 910, 914, 917, 919, 987, 988
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39095	<i>maytʰi</i> ‘the one downstream’, 170	39134	<i>mbyom</i> ‘cut’, 69
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39101	<i>mbala</i> ‘bull’, 174, 453	39140	<i>mbuumχt̥r</i> ‘hundred thousands’, 237, 238
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39103	<i>mbat</i> ‘be easy’, 776, 863, 954, 1061– 1063, 1357	39142	<i>mciruʃruw̥p</i> ‘person whose saliva drips continuously’, 157, 435
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39149	<i>mdaszuuy</i> ‘bow’, 1216	39188	<i>mpʰur</i> ‘wrap’, 676, 870, 988
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39236	<i>mrpyrt^h_y_p</i> ‘be in the middle’, 885	39275	<i>nbras</i> ‘loosen the earth’, 585
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41656	<i>u-rtsawa</i> ‘importance’, 1220	41695	<i>u-tsunlyn</i> ‘favour’, 1312
41657	<i>u-rtsot</i> ‘vengeance’, 1212	41696	<i>u-t^hor</i> ‘on the ground’, 128
41658	<i>u-rtsuz</i> ‘number’, 1220	41697	<i>u-t^hor</i> ‘ground’, 115, 126–128
41659	<i>u-ru</i> ‘its stalk’, 268	41698	<i>u-t^hycu</i> ‘downstream of’, 350
41660	<i>u-ryit</i> ‘her children’, 243	41699	<i>u-t^hyβ</i> ‘between’, 350
41661	<i>u-ryxŋgo</i> ‘its radiating pain’, 321	41700	<i>u-t^hurzi</i> ‘mercy’, 362, 1400
41662	<i>u-ryy</i> ‘predicted time’, 1012	41701	<i>u-xso</i> ‘empty, normal’, 121, 180, 794
41663	<i>u-ruuz</i> ‘species’, 1016	41702	<i>u-xso</i> ‘something empty, normal’, 120
41664	<i>u-skṛt</i> ‘language’, 1359, 1361	41703	<i>u-xçrt</i> ‘strength’, 363, 1400, 1425
41665	<i>u-skṛt</i> ‘language, noise’, 118	41704	
41666	<i>u-skṛt</i> ‘speech, sound’, 362	41705	
41667	<i>u-spa</i> ‘its material’, 201, 1259, 1275,	41706	
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41708	<i>w-z-ryzi</i> “, 742	41747	<i>w-βra</i> ‘his share’, 1171
41709	<i>w-zarzur</i> ‘sides’, 178	41748	<i>w-βra</i> ‘it is X’s turn to...’, 129, 1171
41710	<i>w-zuur</i> ‘side’, 178, 182	41749	<i>w-βzur</i> ‘its side’, 1280
41711	<i>w-zuurstuzur</i> ‘the furthest place on the side’, 182	41750	<i>w-χcrl</i> ‘center’, 1037, 1038
41712		41751	<i>w-χcrl</i> ‘middle’, 148, 159, 1040, 1041
41713	<i>w-ŋgu + t^hon</i> ‘be well-off’, 1229	41752	<i>w-χcrl</i> ‘middle, center’, 350
41714	<i>w-ŋgu</i> ‘beginning’, 342	41753	<i>w-χsjuβ</i> ‘slough’, 88
41715	<i>w-ŋgumyŋpc̥i</i> ‘the inside and the outside’, 181	41754	<i>w-χsyr</i> ‘number’, 1220
41716		41755	<i>wzo</i> ‘he’, 224, 896, 1196, 1311
41717	<i>w-ŋguz</i> ‘among’, 324, 1439	41756	<i>wzry</i> ‘3SG:GEN’, 317
41718	<i>w-ŋguz</i> ‘inside, among’, 358	41757	<i>nat</i> ‘be tired’, 635, 780, 947, 1057, 1058
41719	<i>w-ŋgu</i> ‘inside’, 153, 181, 289, 326, 339,	41758	<i>nastyi</i> ‘length between the thumb and the middle finger’, 276
41720	350, 351, 356, 358, 576, 1014,	41759	
41721	1015, 1038	41760	<i>nax</i> ‘be black’, 158, 159, 161, 794, 840, 900, 1064
41722	<i>w-yrom</i> ‘dried thing’, 794	41761	
41723	<i>w-γurza</i> ‘several hundreds’, 246	41762	<i>ncyyrcyrt</i> ‘many people, very noisy’, 96
41724	<i>w-γnax</i> ‘disaster’, 80, 794	41763	
41725	<i>w-γŋju</i> ‘orifice’, 794	41764	<i>ncyr</i> ‘press’, 82
41726	<i>w-ŋutm</i> ‘flesh’, 1066	41765	<i>ncuŋcri</i> ‘thin, diluted’, 94
41727	<i>w-nqra</i> ‘broken one’, 119, 173, 1028,	41766	<i>nc^hoꝝ</i> ‘shrink’, 82
41728	1029	41767	<i>nc^hyaꝝ</i> ‘birchbark’, 96
41729	<i>w-nqra</i> ‘shabby’, 94	41768	<i>no</i> ‘be prepared’, 793, 814
41730	<i>w-nqra</i> ‘something broken’, 120	41769	<i>no</i> ‘be ready’, 83, 846
41731	<i>w-ŋjiz</i> ‘wish’, 118, 792, 1205, 1363	41770	<i>njo</i> ‘have damages’, 47
41732	<i>w-ŋle</i> ‘reputation’, 115, 168, 1230	41771	<i>njoꝝ</i> ‘glue, paste’, 787
41733	<i>w-ŋo + mbi</i> ‘be discouraged’, 911, 915,	41772	<i>njoꝝ</i> ‘paste’, 870, 872, 876
41734	956, 1066, 1229	41773	<i>nŋyŋtŋyŋt</i> ‘plump and huge’, 95
41735	<i>w-ŋo + p^hi</i> ‘be disappointed by’, 911, 915,	41774	<i>nŋyβ</i> ‘be crushed, flattened’, 911
41736	1229	41775	<i>nŋu</i> ‘be opened’, 794
41737	<i>w-ŋo + yŋmbi</i> ‘be easily discouraged’,	41776	<i>nŋu</i> ‘open’, 910
41738	956	41777	<i>nŋ-k-ŋtuy-ci</i> ‘he met’, 388
41739	<i>w-ŋre</i> ‘authority’, 1032	41778	<i>nŋndi</i> ‘in four days’, 282
41740	<i>w-ŋzuy</i> ‘appearance’, 1040	41779	<i>nŋndyŋpa</i> ‘in four years’, 283
41741	<i>w-ŋjo</i> ‘diluted drink’, 180	41780	<i>nŋu-kuu-nuu-çar</i> ‘looking for’, 387
41742	<i>w-ŋjɔŋe</i> ‘all kinds of diluted drinks’,	41781	<i>nqa</i> ‘be difficult’, 82, 1357
41743	180	41782	<i>nqiazwyr</i> ‘Artemisia sp.’, 148
41744	<i>w-ŋyri</i> ‘before, in front of’, 350	41783	<i>nqiaꝝ</i> ‘dark side of the mountain’, 88,
41745	<i>w-ŋyri</i> ‘in front of; before’, 282 ¹⁴	41784	148
41746	<i>w-βlu</i> ‘trick’, 1218		

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41785	<i>nqob</i> ‘hang’, 354, 817, 818, 820, 918 ²⁵ , 921	41824	<i>vnndyr</i> ‘scatter’, 81
41786		41825	<i>vndu</i> ‘hit’, 18, 32, 926, 982
41787	<i>nqhi</i> ‘be dirty’, 82, 900	41826	<i>vnni-xpa</i> ‘two years’, 255
41788	<i>ngarmu</i> ‘female one quarter yak hybrid’, 174	41827	<i>vnni-zlob</i> ‘two times’, 255
41789		41828	<i>vnnuz</i> ‘two’, 7, 233–235, 245, 297, 366, 367, 593, 1313
41790	<i>ngarpa</i> ‘male one quarter yak hybrid’, 174	41829	<i>vnni</i> ‘suspect’, 1329
41791		41830	<i>vnrulu</i> ‘hornless’, 169
41792	<i>ngar</i> ‘peel off’, 910	41831	<i>vnrulu</i> ‘without horns’, 91
41793	<i>ngar</i> ‘peel, shed skin’, 160	41832	<i>vnrurpu</i> ‘hitting with horns’, 790, 791
41794	<i>ngia</i> ‘come loose’, 87, 910	41833	<i>vnzzi</i> ‘be necessary’, 316
41795	<i>nclut</i> ‘break’, 89, 910, 914, 919	41834	<i>vzrajvzraj</i> ‘dishevelled’, 93
41796	<i>NGočna</i> ‘spider’, 68	41835	<i>vzvymi</i> ‘husband and wife’, 177, 367
41797	<i>ngras</i> ‘be torn’, 91, 910, 1210, 1211	41836	<i>vzvn</i> ‘monastic robe’, 790
41798	<i>ngraz</i> ‘break’, 910	41837	<i>vzvβ</i> ‘be careful’, 81, 769, 1358
41799	<i>ngrut</i> ‘be completely scratched’, 911	41838	<i>vja</i> ‘completely’, 81, 408, 415, 765, 1195
41800	<i>ngru</i> ‘break’, 910, 914, 917, 919, 955	41839	<i>vjo</i> ‘rinse’, 180
41801	<i>ngyt</i> ‘part ways, part company’, 756	41840	<i>vjuvjeri</i> ‘fat and soft’, 93
41802	<i>vaz</i> ‘while ... still’, 186, 324, 1392	41841	<i>vjuvjeti</i> ‘enormous’, 81
41803	<i>vav</i> ‘hatch’, 100, 815	41842	<i>vjuvlyli</i> ‘big and tall’, 90
41804	<i>vbyvbyvβ</i> ‘thick and big’, 81	41843	<i>vjuvgra</i> ‘steward (monastery)’, 81
41805	<i>vduy</i> ‘umbrella’, 81	41844	<i>vnu-zlob</i> ‘two times’, 255
41806	<i>vejlu</i> ‘left hand’, 1022	41845	<i>vzvunuu</i> ‘young man’, 81
41807	<i>vejlu</i> ‘left-handed’, 170	41846	<i>gvylsvyl</i> ‘transparent and round’, 95
41808	<i>ve</i> ‘left’, 155, 170, 413	41847	<i>gvoksnov</i> ‘long and thin’, 76
41809	<i>vgra</i> ‘enemy’, 56, 93, 1043, 1044, 1335 ¹¹	41848	<i>gχwəχxi</i> ‘with big nostrils’, 76
41810	<i>vja</i> ‘verdigris’, 1223	41849	<i>zakastaka</i> ‘each his own’, 219, 383
41811	<i>vjít</i> ‘think of’, 87, 792, 793	41850	<i>zaka</i> ‘each his own’, 219, 383, 518, 965
41812	<i>vjov</i> ‘servant’, 587, 1042, 1043	41851	<i>za</i> ‘begin’, 636, 769, 1300, 1314, 1317, 1318, 1350, 1352
41813	<i>vlvwur</i> ‘suddenly’, 1028, 1043, 1049, 1091, 1193	41852	
41814		41853	<i>za</i> ‘start’, 25, 773, 1306, 1314
41815	<i>vmačmi</i> ‘soldier’, 1040	41854	<i>zdrayzdray</i> ‘long and soft’, 93
41816	<i>vmas</i> ‘army’, 81	41855	<i>zduyzyduy</i> ‘strong, tough’, 77
41817	<i>vmbroy</i> ‘wild yak’, 57, 166	41856	<i>zgas</i> ‘exactly’, 77
41818	<i>vmbyi</i> ‘sun’, 96	41857	<i>zgruij</i> ‘certainly’, 93, 1199, 1200
41819	<i>vmyrsmyuy</i> ‘dark red’, 140, 1011	41858	<i>zimkʰym</i> ‘much’, 383, 1419
41820	<i>vniuy</i> ‘intend to, decide’, 894	41859	<i>zijkʰym</i> ‘country, realm’, 1419
41821	<i>vnačna</i> ‘both’, 81, 233, 235, 366, 1177	41860	<i>zmbrax</i> ‘ear’, 100
41822	<i>vndzvr</i> ‘cut’, 81	41861	<i>zmibri</i> ‘play’, 295, 817, 819, 838
41823	<i>vndyr</i> ‘be scattered’, 44, 910, 911, 913	41862	

41863	<i>zmbri</i> ‘willow’, 93, 153	41902	<i>zyrsuunt^hyr</i> ‘cause oneself to appear’, 883
41864	<i>zmbrukylu</i> ‘willow that does not grow high’, 153	41903	<i>zyrtshⁱ</i> ‘hang oneself’, 883
41865		41904	<i>zyrtsh^ab</i> ‘cause oneself to fall/roll’, 889, 917
41866	<i>zmbru</i> ‘boat’, 756	41905	
41867	<i>zmbrr</i> ‘ulcer’, 77	41906	
41868	<i>zru</i> ‘be strong’, 91	41907	<i>zyrcp^hy^b</i> ‘lay flat’, 886
41869	<i>znga</i> ‘help to wear’, 817	41908	<i>zyrc^thuz</i> ‘reveal one’s true nature’, 889
41870	<i>znga</i> ‘help wearing’, 819, 833	41909	<i>zyryrk^he</i> ‘depreciate, demean’, 891
41871	<i>zngi</i> ‘star’, 93, 723, 726	41910	<i>zyryrte^a</i> ‘recognize one’s mistake’, 886, 1033
41872	<i>zngu</i> ‘cross river’, 77	41911	
41873	<i>zyrfstun</i> ‘take care of oneself’, 883	41912	<i>zyryrt^crt</i> ‘volunteer’, 998
41874	<i>zyrf^crt</i> ‘tell about oneself’, 884	41913	<i>zyryrygi</i> ‘consider oneself to be right’, 886
41875	<i>zyrk^ho</i> ‘give oneself up’, 884	41914	
41876	<i>zyrmaylo</i> ‘put oneself upstream’, 885, 1037	41915	<i>zyryrzo</i> ‘make oneself light’, 890, 894
41877		41916	<i>zyrytmuy</i> ‘decide for oneself’, 894
41878	<i>zyrmyp^hrt^hy^b</i> ‘put oneself in between’, 885, 1037	41917	<i>zyrbri</i> ‘protect oneself’, 845
41879		41918	<i>zyrytci</i> ‘wash oneself’, 883, 887, 939
41880	<i>zyrymo</i> ‘prepare oneself’, 846	41919	<i>zrni</i> ‘3DU’, 965
41881	<i>zyrynym^crr</i> ‘consider oneself to be beautiful’, 895	41920	<i>zrwu</i> ‘lame person’, 1008
41882		41921	<i>zuruuzyri</i> ‘progressively’, 1078, 1173, 1190
41883	<i>zyryrstu</i> ‘believe in oneself’, 883, 895	41922	
41884	<i>zyrynumbr^hpu</i> ‘let oneself be mounted’, 885	41923	<i>zNGOr</i> ‘hang’, 817, 921
41885		41924	<i>zNGro</i> ‘Jew’s harp’, 93
41886	<i>zyrynuflu</i> ‘be fooled’, 885	41925	<i>zNGro</i> ‘jew’s harp’, 1216
41887	<i>zyrypa</i> ‘pretend’, 527–529, 884, 889, 1221, 1295	41926	<i>zNGulor</i> ‘walnut’, 77
41888		41927	<i>þde</i> ‘throw’, 576, 668, 973
41889	<i>zyrku</i> ‘put oneself in’, 883	41928	<i>þdi</i> ‘be well’, 514, 844, 848, 878, 1046, 1211, 1230
41890	<i>zyrryp^hu</i> ‘act according to one’s ability’, 1029	41929	
41891		41930	<i>þdi</i> ‘be well, be good’, 605, 770, 775
41892	<i>zyrrzyrr</i> ‘having some (pieces) coming out (out of a bundle)’, 896	41931	<i>þdut</i> ‘demon’, 72
41893		41932	<i>þgoz</i> ‘prepare’, 72
41894		41933	<i>þluu</i> ‘burn’, 89, 583, 584, 785, 1082
41895	<i>zyrsat</i> ‘commit suicide’, 883	41934	<i>þras</i> ‘attach to’, 870
41896	<i>zyrsipa</i> ‘transform oneself into’, 894	41935	<i>þras</i> ‘attach’, 91, 162, 821, 870
41897	<i>zyrsyrbat</i> ‘move closer’, 628, 635, 892	41936	<i>þri</i> ‘protect’, 588, 845, 908
41898	<i>zyrsyrq^hi</i> ‘move further away’, 630, 635, 892	41937	<i>þrjan</i> ‘stretch tight’, 441
41899		41938	<i>þrjan</i> ‘stretch’, 72
41900	<i>zyrsyzyut</i> ‘manage to reach’, 628	41939	<i>þzajsa</i> ‘friend’, 72, 175, 1222
41901	<i>zyrsycke</i> ‘burn oneself’, 886	41940	<i>þzduu</i> ‘collect’, 72, 878

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41941	<i>βze</i> ‘grow’, 494, 1003	41980	<i>χawo</i> ‘if only’, 450
41942	<i>βzgvr</i> ‘delay’, 72	41981	<i>χcoŋkroŋ</i> ‘cross-legged (sitting)’, 81
41943	<i>βzi</i> ‘be drunk’, 868, 946, 947	41982	<i>χcuχcri</i> ‘thin, diluted’, 93
41944	<i>βzi</i> ‘get drunk’, 838	41983	<i>χcʰa</i> ‘right’, 81, 155, 413
41945	<i>βzjoz</i> ‘learn’, 922, 923, 932, 934, 938, 1347	41984	<i>χcʰobe</i> ‘right and left’, 103, 155
41946		41985	<i>χpa</i> ‘be proud’, 989
41947	<i>βzjoz</i> ‘learns’, 88	41986	<i>χpaχtsʰst</i> ‘yojana’, 277
41948	<i>βzu</i> ‘make’, 31, 295, 347, 348, 493, 494, 574, 575, 666, 753, 757, 763, 779, 782, 783, 790, 791, 793, 870, 872, 873, 899, 940, 1003, 1006, 1007, 1022, 1025, 1027, 1029, 1042, 1060, 1061, 1211– 1213, 1221, 1226, 1325–1329, 1332, 1333, 1359–1361	41987	<i>χpi</i> ‘story’, 81
41949		41988	<i>χpjv̥t</i> ‘observe’, 88, 1061
41950		41989	<i>χploŋχploŋ</i> ‘round like a ball’, 90
41951		41990	<i>χpunbu</i> ‘master’, 1040
41952		41991	<i>χpun</i> ‘monk’, 13, 1026, 1027, 1042, 1220
41953		41992	<i>χsu</i> ‘raise’, 1324
41954		41993	<i>χs̥r-ts̥sy</i> ‘three stories’, 254
41955		41994	<i>χs̥r-tya</i> ‘three spans’, 254
41956	<i>βzu</i> ‘make, do’, 772	41995	<i>χs̥rl</i> ‘be clear’, 998
41957	<i>βzjur</i> ‘change, correct’, 606	41996	<i>χs̥rl</i> ‘eat (honorific)’, 661
41958	<i>βzjur</i> ‘transform’, 72	41997	<i>χs̥rr</i> ‘gold’, 81, 135, 136, 178, 376, 415, 416
41959	<i>βzur</i> ‘move’, 156, 1061	41998	
41960	<i>βji</i> ‘chase’, 982	41999	<i>χsuu-ri-xpa</i> ‘three hundred years’, 252
41961	<i>βji</i> ‘chase, catch up with’, 72, 631	42000	<i>χsuu-xpa</i> ‘three years’, 255
41962	<i>βjv̥t</i> ‘get, obtain’, 528, 1184	42001	<i>χsuu-yjv̥n</i> ‘three times’, 255
41963	<i>βjv̥t</i> ‘obtain’, 668, 994, 995, 1270	42002	<i>χsuu~χs̥rr</i> ‘things in gold’, 178
41964	<i>βya</i> ‘mill’, 95, 147, 161, 1002	42003	<i>χsum</i> ‘three’, 222, 234, 245, 247, 266
41965	<i>βya</i> ‘watermill’, 756	42004	<i>χtsiu</i> ‘bushel’, 278
41966	<i>βyrru</i> ‘miller’, 161, 1002	42005	<i>χtsiu</i> ‘pint’, 88
41967	<i>βyrsni</i> ‘mill axle’, 147	42006	<i>χtso</i> ‘it is clean’, 81
41968	<i>βyrsrpr̥t</i> ‘watermill valve’, 756	42007	<i>χtsʰyχtsʰyt</i> ‘small and active’, 81
41969	<i>βyrrza</i> ‘fly’, 167, 172 ²³ , 172	42008	<i>χtci</i> ‘wash’, 38, 883, 887, 923, 938, 1071
41970	<i>βyuut</i> ‘be burned off’, 841	42009	<i>χtcoŋ</i> ‘rheumatism’, 81
41971	<i>βyuuz</i> ‘badger’, 167	42010	<i>χt̥rma</i> ‘offerings’, 81
41972	<i>βva</i> ‘prevail’, 97	42011	<i>χt̥r̥r</i> ‘scatter’, 44, 55, 910, 911, 913
41973	<i>βva</i> ‘prevail, win’, 723	42012	<i>χtv̥t</i> ‘lean on’, 1228
41974	<i>βva</i> ‘win’, 156	42013	<i>χtuu</i> ‘buy’, 64, 156, 344, 689, 836, 923, 1061
41975	<i>βv̥nŋo</i> ‘winning and losing’, 156	42014	
41976	<i>βzar</i> ‘buzzard’, 72	42015	<i>χt̥suydža</i> ‘butter tea’, 81
41977	<i>βzar</i> ‘cut’, 985	42016	<i>χwyr</i> ‘Hor’, 86
41978	<i>βzindi</i> ‘in five days’, 282	42017	<i>χceas</i> ‘pass away’, 670
41979	<i>βzindv̥pa</i> ‘in five years’, 283	42018	<i>χceu=mas</i> ‘thank a lot’, 487

- 42019 *χεу* ‘be strong’, 81, 989
42020 *χεрлмуу* ‘glasses’, 183, 1223
42021 *χεрлзгоң* ‘mirror’, 725
42022 *χεрл* ‘glass’, 183²⁹
42023 *χεүнрзи* ‘Yama’, 101
42024 *χиңжир* ‘without energy’, 81
42025 *χыңжыт* ‘light (clothes)’, 81

